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A Study of Employment Aspects of Vocational Education in Thailand (1970-75)

by

Apichai Puntasen
Boonchuai Sreecompon

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A PRELIMINARY REPORT

ON

A STUDY OF EMPLOYMENT ASPECTS OF VOCATIONAL EDUCATION IN THAILAND (1970-75)

presented to

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By Dr. Apichai Puntasen,
and Assistant Professor
Boonchuai Sreecompon

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บทคัดย่อ

การวิจัยเรื่อง ผู้สำเร็จอาชีวศึกษากับการจ้างงานนี้ ได้ใช้ข้อมูลจาก ๓ แหล่งด้วยกัน คือ

๑. สำมะโนประชากรและเคหะ พ.ศ. ๒๕๐๓ สำนักงานสถิติแห่งชาติ ทั้งนี้โดยได้รับความร่วมมือจากสำนักงานแห่งนี้ ได้คัดข้อมูลจากสำมะโนออกมาเฉพาะผู้ที่มีความรู้ในด้านอาชีวศึกษา

๒. ข้อมูลการติดตามผู้สำเร็จอาชีวศึกษาปี ๒๕๑๔ และ ๒๕๑๕ จากรายงานประจำปีของกรมอาชีวศึกษา

๓. ข้อมูลจากการสำรวจโดยใช้แบบสอบถาม ซึ่งได้ตัวอย่างที่ใช้ได้ทั้งหมด ๑,๒๗๗ ตัวอย่าง โดยเลือกสุ่มจากประชากร ๘ กลุ่มด้วยกัน ทั้งนี้ ๓ กลุ่มแรกเป็นนักเรียนอาชีวศึกษาในระดับ ม.ศ. ๓ , ม.ศ. ๖ และ ปวส. อีก ๓ กลุ่มต่อมาเป็นผู้สำเร็จอาชีวศึกษาในแต่ละระดับที่ทำงานแล้ว ทั้งนี้โดยสุ่มจากอาชีวศึกษาทั้ง ๕ สาขาใหญ่ ๆ คือ เกษตรกรรม, พณิชยกรรม, คหกรรม, ศิลปกรรม และ การช่างและอุตสาหกรรม อีก ๒ กลุ่มเป็นนายจ้างซึ่งแยกเป็นผู้จ้างและไม่จ้างผู้สำเร็จอาชีวศึกษา ตัวอย่างเหล่านี้สุ่มจากทุกภาคของประเทศไทย โดยแต่ละภาคเลือกเฉพาะบางจังหวัดที่สำคัญรวมทั้งหมด ๑๗ จังหวัดด้วยกัน ผลของการศึกษาวิจัยโดยย่อปรากฏดังนี้

เมื่อพิจารณาอย่างคร่าว ๆ ของตัวเลขข้อมูลทั้ง ๓ แหล่ง มีบางลักษณะของตัวเลขที่ควรชี้ให้เห็นเป็นอันดับแรก คือ

จากตัวเลขของสำมะโนประชากร เราพบว่าผู้สำเร็จจากอาชีวศึกษาทั้ง ๕๔ % ทำงานในภาครัฐบาล ส่วนอีก ๔๖ % ทำงานในภาคเอกชน

จากตัวเลขติดตามผู้สำเร็จอาชีวศึกษาของกรมอาชีวศึกษา เราพบว่า ผู้สำเร็จ ม.ศ. ๖ ว่างงานถึง ๔๓.๙๗ % ส่วนผู้สำเร็จสาขาที่ว่างงานสูงสุด คือ สาขาเกษตรกรรม ส่วนสาขาศิลปกรรมไม่มีว่างงานเลย ระดับประกาศนียบัตรวิชาชีพชั้นสูง (ปวส.) ว่างงาน ๑๗.๙๙ %

จากตัวเลขที่เราสำรวจเองนั้นพบว่าหน่วยธุรกิจที่ไม่จ้างผู้สำเร็จอาชีวศึกษานั้น จะมีความแตกต่างกับหน่วยธุรกิจที่จ้างผู้สำเร็จอาชีวศึกษาในด้านการจ้างงาน กล่าวคือลูกจ้างของหน่วยธุรกิจที่ไม่จ้างผู้สำเร็จอาชีวศึกษานั้นส่วนใหญ่จะมีการศึกษาต่ำ ประกอบด้วยผู้ที่ไม่ได้เรียนหนังสือกับผู้ที่เรียนไม่เกินประถมศึกษาตอนปลาย

ตัวเลขจากสำมะโนประชากรนั้น ไม่แยกให้ถึงสาขาต่าง ๆ ของผู้จบอาชีวศึกษา แต่แยกระดับผู้จบเป็น ม.ศ. ๓ , ม.ศ. ๔-๕, ม.ศ. ๖ และสูงกว่า ม.ศ. ๖ เมื่อพิจารณาเกี่ยวกับแรงงานของผู้จบอาชีวศึกษา เราพบว่าผู้จบ ม.ศ. ๓ และ ผู้จบสูงกว่า ม.ศ. ๖ อยู่ในตลาดแรงงานมากที่สุด คือ ๘๐.๘๘ % และ ๘๕.๔๓ % ตามลำดับ อยู่นอกตลาดแรงงาน (คือผู้ที่เป็นแม่บ้าน, นักเรียนนักศึกษา, นักบวช, นักโทษ, ผู้พิการ และอื่น ๆ) ของการศึกษาใน ๒ ระดับดังกล่าวมีไม่เกิน ๒๐ % สำหรับผู้ที่อยู่ในตลาดแรงงานมีอัตราว่างงานโดยส่วนรวมทุกระดับของผู้จบอาชีวศึกษาเท่ากับ ๘.๘๐ % ผู้จบ ม.ศ. ๖ ว่างงาน

สูงสุดคือ ๑๗.๒๓ % อัตราว่างงานที่ต่ำสุดเป็นของผู้จบในระดับ ม.ศ. ๔-๕ ซึ่งมีเพียง ๕.๒๑ % เท่านั้น นอกจากนี้อัตราการว่างงานยังมีความแตกต่างกันระหว่างเพศ และที่ตั้งของสถานที่ทำงาน (ในและนอกเขตเทศบาล)

การพิจารณาการทำงานของผู้สำเร็จอาชีวศึกษาในอุตสาหกรรมประเภทต่าง ๆ เราพบว่าผู้สำเร็จอาชีวศึกษาทำงานในอุตสาหกรรมประเภทที่เกี่ยวกับการบริการ (tertiary industry) มากที่สุด อุตสาหกรรมที่ผู้จบอาชีวศึกษทำงานมากเป็นอันดับรองลงไปคือ อุตสาหกรรมโรงงาน (secondary industry) และอุตสาหกรรมขั้นปฐม (primary industry) ซึ่งเป็นเช่นนี้ทั้งภาคเอกชนและภาครัฐบาล แต่ในอุตสาหกรรมที่เกี่ยวกับการบริการนั้น ผู้จบอาชีวศึกษาทำงานในภาครัฐบาลมากกว่า ส่วนในอุตสาหกรรมอีก ๒ ประเภทนั้น ผู้จบอาชีวศึกษาทำงานในภาคเอกชนมากกว่า แต่โดยส่วนรวมแล้วผู้จบอาชีวศึกษาจะทำงานในภาครัฐบาลมากกว่า นอกจากนี้เรายังแบ่งการทำงานของผู้จบอาชีวศึกษาเป็นอาชีพต่าง ๆ เช่น อาชีพที่ใช้วิชาชีพ อาชีพผู้บริหาร อาชีพเสมียน ฯลฯ ซึ่งผู้ที่จบอาชีวศึกษาจะประกอบอาชีพเสมียนมากที่สุด อย่างไรก็ตามลักษณะการประกอบอาชีพก็แตกต่างกันไปตามประเภทของอุตสาหกรรมและการทำงานในภาครัฐบาลหรือเอกชน

ตัวเลขจากการติดตามผู้สำเร็จอาชีวศึกษาปี ๒๕๑๔ และ ๒๕๑๕ ของกรมอาชีวศึกษาได้แยกประเภทของผู้สำเร็จอาชีวศึกษาออกเป็น ๓ ลักษณะด้วยกัน คือ แยกตามระดับการศึกษาที่จบมี ม.ศ. ๓ , ม.ศ. ๖ , ปวส. และระดับฝึกหัดครู แยกตามสาขาที่สำเร็จซึ่งมี

๕ สาขาดังกล่าวแล้ว และแยกตามประเภทของสถานศึกษาที่จบซึ่งได้แยกเป็น ๒ ประเภทคือ สถานศึกษาที่อยู่ในโครงการเงินกู้เพื่อพัฒนาอาชีวศึกษา และสถานศึกษาที่อยู่นอกโครงการเงินกู้ สาขาอาชีวศึกษาที่อยู่ในโครงการเงินกู้มีเพียง ๒ สาขาเท่านั้นคือ สาขาเกษตรกรรมและสาขาการช่างอุตสาหกรรม ตัวเลขสำรวจในระยะ ๖ เดือนแรกหลังการสำเร็จการศึกษา

ตัวเลขของผู้ที่อยู่ในตลาดแรงงานตามการสำรวจของกรมอาชีวศึกษานั้น ต่างจากตัวเลขสำมะโนประชากร กล่าวคือ ผู้ที่อยู่นอกตลาดแรงงานตามความหมายของกรมอาชีวศึกษานั้นมีเฉพาะผู้ที่เรียนต่อเท่านั้น ผู้จบในระดับฝึกหัดครูจะอยู่ในตลาดแรงงานในอัตราสูงสุดและที่อยู่ในตลาดแรงงานในอัตราต่ำสุดคือ ผู้จบ ม.ศ. ๖ ในบรรดาผู้ที่อยู่ในตลาดแรงงานจะมีอัตราการว่างงานประมาณ ๓๐ % โดยผู้ที่จบในระดับสูงจะมีอัตราการว่างงานต่ำกว่าผู้จบในระดับต่ำ และผู้ที่จบในระดับสูงจะมีอัตราการทำงานในภาครัฐบาลสูงกว่าผู้ที่จบในระดับต่ำและโดยเฉลี่ยทั้งหมดจะทำงานในภาคเอกชนประมาณ ๔๕ % ซึ่งเป็นตัวเลขที่ใกล้เคียงกับตัวเลขสำมะโนประชากร (๔๖ %)

ผู้จบ ม.ศ. ๓ และ ม.ศ. ๖ ซึ่งอัตราการว่างงานสูงในระดับใกล้เคียงกันนั้น รายได้เฉลี่ยต่อเดือนจะใกล้เคียงกันมาก (๘๓๒.๔๒ และ ๙๐๕.๒๖ บาทตามลำดับ) สำหรับผู้จบในระดับ ปวส. และฝึกหัดครู ซึ่งอัตราการว่างงานค่อนข้างต่ำนั้น รายได้ต่อเดือนโดยเฉลี่ยจะใกล้เคียงกัน (ประมาณ ๑,๓๐๐ บาท)

ในด้านสาขาต่าง ๆ ของอาชีวศึกษานั้น สำหรับ ม.ศ. ๓ มีการสอนกันเพียง ๒ สาขาเท่านั้น (อาชีวศึกษาระดับนี้จะเลิกไปในที่สุด)

คือสาขาการช่างและอุตสาหกรรมกับสาขาคหกรรม รายได้ต่อเดือนโดยเฉลี่ยของสาขาคหกรรมต่ำกว่าพอสมควร (๖๐๐.๐๐ และ ๘๖๐.๒๙ บาท)

ในระดับ ม.ศ. ๖ นั้น อัตราการว่างงานที่สูงสุดคือผู้สำเร็จในสาขาเกษตรกรรม รายได้ต่อเดือนโดยเฉลี่ยที่ต่ำสุดคือผู้จบสาขาคหกรรมและสูงสุดคือผู้จบเกษตรกรรม (๖๕๐ และ ๙๕๖ บาท ตามลำดับ)

ระดับ ปวส. อัตราว่างงานเป็นศูนย์คือผู้จบสาขาศิลปกรรม ผู้จบสาขาการช่างและอุตสาหกรรมจะมีอัตราการว่างงานต่ำสุดถ้าไม่นับผู้จบสาขาศิลปกรรม (๑๑.๐๒ %) รายได้ต่อเดือนโดยเฉลี่ยสูงสุดก็เป็นสาขาการช่างและอตสาหกรรมประมาณเดือนละ ๑,๔๑๑ บาท

ในระดับฝึกหัดครู อัตราว่างงานสูงสุดคือสาขาเกษตรกรรม ในขณะเดียวกันที่ผู้จบสาขานี้มีรายได้ต่อเดือนโดยเฉลี่ยสูงสุด (ประมาณ ๑,๓๐๐ บาท)

พิจารณาในแง่ของประเภทของสถานศึกษาที่จบ ซึ่งแบ่งเป็น ๒ ประเภทคือ สถานศึกษาในโครงการเงินกู้เพื่อพัฒนาอาชีวศึกษา และสถานศึกษานอกโครงการ เราไม่อาจสรุปได้แน่นอนนักว่า ผู้สำเร็จจากสถานศึกษาในโครงการฯ จะดีกว่า เนื่องจากพิจารณาในแง่อัตราการเข้าสู่ตลาดแรงงานแล้ว ผู้จบจากโครงการเงินกู้จะมีอัตราต่ำกว่าผู้จบจากนอกโครงการ แต่ในแง่ของรายได้ต่อเดือนโดยเฉลี่ยแล้ว ผู้จบจากโครงการจะสูงกว่า นอกจากนี้ยังมีรายละเอียดเกี่ยวกับสาขาและระดับที่จบเข้ามาร่วมพิจารณาด้วย

การศึกษาจากข้อมูลที่เราสำรวจเองโดยใช้แบบสอบถามนั้น ได้แบ่งเป็น ๕ ประเด็น คือ

๑. ความคิดเห็นของนักเรียนระดับ ม.ศ. ๓ , ม.ศ. ๖ และ ปวส. เกี่ยวกับอนาคตของเขา พร้อมทั้งความคิดเห็นในเรื่องหลักสูตรที่เรียน

๒. ความคิดเห็นของผู้สำเร็จการศึกษาที่กำลังทำงานอยู่ ในเรื่องความรู้ที่ตนเรียนมาและปัญหาการหางานทำ

๓. ศึกษาเกี่ยวกับระยะเวลาหางานหลังจากจบการศึกษา การเปลี่ยนงาน และจำนวนผู้สมัครต่อตำแหน่งที่ต้องการ

๔. วิธีการเลือกลูกจ้างเข้าทำงานและความคิดเห็นของนายจ้างต่อลูกจ้างที่สำเร็จอาชีวศึกษา

๕. ลักษณะของหน่วยธุรกิจในเรื่องของลูกจ้าง

ประเด็นแรก นักเรียน ม.ศ. ๓ ไม่มีใครคิดจะทำงานหลังสำเร็จ นักเรียน ม.ศ. ๖ มี ๖ % เท่านั้นที่คิดจะทำงานหลังจากจบการศึกษาในระดับนี้ นักเรียน ปวส. ๙๗ % มาจากสายอาชีวศึกษา (การเข้าศึกษาอาชีวศึกษาในระดับนี้อาจมาจากสายอื่นได้) และประมาณ ๘๕ % ที่อยากจะเรียนต่อในระดับปริญญาเกี่ยวกับหลักสูตรที่เรียน ส่วนใหญ่มีความเห็นว่า จะสามารถช่วยในการทำงานในอนาคตได้ดี แต่ก็ยังมีบางส่วนที่มีความเห็นว่าหลักสูตรเป็นทฤษฎีมากเกินไป ควรจะมีภาคปฏิบัติให้มากกว่านี้ ความคิดเห็นแตกต่างกันตามระดับการศึกษาและสาขาที่เรียน

สำหรับประเด็นที่ ๒ ผู้จบอาชีวศึกษาที่กำลังทำงานอยู่ส่วนใหญ่มีความเห็นว่าการศึกษาที่สูงกว่าระดับที่เขาสำเร็จมาจะไม่ช่วยในอาชีพที่เขาทำอยู่ให้ดีขึ้น เขาเชื่อว่า

เวลาที่จะเสียไปจากการศึกษาในระดับสูงขึ้นนั้น จะสูประสบการณ์จากการทำงานไม่ได้ อย่างไรก็ตาม เราพบว่าการไม่เรียนต่อในระดับสูงขึ้นไปนั้นก็เนื่องจากปัญหาทางด้านการเงิน จากแบบสอบถามที่ตอบมาเราคิดว่าบุคคลพวกนี้จะเรียนต่อถ้าไม่มีอุปสรรคทางด้านการเงิน

ในด้านการหางานทำหลังจากจบการศึกษานั้น เราพบว่าหญิงจะหางานได้เก่งกว่าชาย

ประมาณร้อยละ ๓๐ ของผู้ที่ได้รับการสัมภาษณ์บอกว่า นายจ้างยังจะคงจ้างเขาแม้จะไม่มีความรู้ในด้านอาชีวศึกษาระดับ ม.ศ. ๖ หรือ ปวส. แสดงว่าประมาณร้อยละ ๗๐ ต้องใช้ความรู้ที่ศึกษามาในระดับ ม.ศ. ๖ หรือ ปวส. เพื่อทำงานในตำแหน่งหน้าที่

ในประเด็นที่ ๓ นั้น ผู้สำเร็จอาชีวศึกษาในระดับ ม.ศ. ๓ , ม.ศ. ๖ และ ปวส. จะเสียเวลาหางานทำครั้งแรกโดยเฉลี่ยแล้วประมาณ ๔.๖ , ๓.๕ , และ ๒.๕ เดือนตามลำดับ นอกจากนี้เรายังได้แยกรายละเอียดในเรื่องการหางานทำครั้งแรกนี้ตามเพศและสาขาการศึกษาที่สำเร็จ ซึ่งจะดูได้จากตาราง ๑๖.๔ , ๑๖.๗ และ ๑๖.๘

ต่อไปเป็นการพิจารณาในเรื่องจำนวนครั้งของการเปลี่ยนงานโดยเฉลี่ยซึ่งเราหวังว่าจะมีความสัมพันธ์ในทางกลับกันกับระยะเวลาหางานหลังสำเร็จโดยเฉลี่ย ซึ่งหมายถึงว่ากลุ่มที่เปลี่ยนงานบ่อยกว่าก็จะมีระยะเวลาหางานหลังสำเร็จสั้นกว่า ซึ่งตัวเลขที่ปรากฏได้ยืนยันว่าเป็นไปตามที่เราหวังไว้

เราได้คำนวณระยะเวลาว่างงานเฉลี่ยต่อปีของการทำงานของผู้สำเร็จอาชีวศึกษาโดยมีหน่วยเป็นเดือน จำนวนเดือนว่างงานโดยเฉลี่ยปรากฏว่า ผู้จบ ม.ศ. ๓ ว่างงานสูงสุด (๒.๒ เดือน) รองลงไปคือผู้จบ ม.ศ. ๖ (๑.๔ เดือน) และต่ำสุดคือผู้จบ

ปวส. (๑.๑ เดือน) นอกจากนี้เราได้แยกรายละเอียดตามจำนวนครั้งในการเปลี่ยนงาน พร้อมทั้งแยกตามสาขาที่จบมาด้วย (ดูตาราง ๑๙.๑ และ ๑๙.๒)

จากตัวอย่างที่สำรวจเราได้คำนวณอัตราส่วนของตำแหน่งงานที่ว่างต่อผู้สมัครที่จบอาชีวศึกษาด้วย พบว่าอัตราส่วนสูงสุด (มีผู้สมัครต่อตำแหน่งว่างต่ำสุด) คือผู้สมัครที่จบอาชีวศึกษาในสาขาเกษตรกรรม และผู้สมัครที่จบอาชีวศึกษาในสาขาพณิชยกรรมมีอัตราส่วนดังกล่าวต่ำสุด นอกจากนี้เรายังแยกรายละเอียดเกี่ยวกับขนาดของหน่วยธุรกิจ (Firm) และผู้สมัครงานด้วย (ดูตารางที่ ๒๐.๑ และ ๒๐.๒)

ประเด็นที่ ๔ เป็นการศึกษาด้านนายจ้างหรือเจ้าของธุรกิจ เราได้แบ่งหน่วยธุรกิจ ๓ วิธีด้วยกัน คือ แบ่งตามสัญชาติของเจ้าของ (ต่างชาติและไทย) แบ่งตามประเภทของอุตสาหกรรม (อุตสาหกรรมสินค้าขั้นปฐม อุตสาหกรรมโรงงาน และอุตสาหกรรมที่เกี่ยวกับการบริการ) และแบ่งตามขนาดของหน่วยธุรกิจ (เล็ก, กลาง และใหญ่) ลักษณะการคัดเลือกคนงานเข้าทำงานของหน่วยธุรกิจไทย จะมาจากการแนะนำของบุคคลต่าง ๆ เป็นส่วนใหญ่ ในขณะที่หน่วยธุรกิจต่างชาติ (มีคนไทยเป็นหุ้นส่วนอยู่) จะได้คนงานจากการประกาศทางสื่อมวลชนเป็นส่วนใหญ่ นอกจากนี้ก็มีรายละเอียดแตกต่างกันไประหว่างประเภทของอุตสาหกรรมและขนาดของหน่วยธุรกิจซึ่งจะดูได้จาก ตารางที่ ๒๑.๑ และ ๒๑.๒

ในความเห็นของนายจ้างเกี่ยวกับความรู้ความสามารถในการปฏิบัติงานของลูกจ้างที่สำเร็จอาชีวศึกษาพบว่าหน่วยธุรกิจไทยมีความพอใจมากกว่าหน่วยธุรกิจต่างชาติ รายละเอียดเกี่ยวกับเรื่องนี้ยังแยกเป็นอุตสาหกรรม, ขนาดของหน่วยธุรกิจ, ระดับการศึกษาของลูกจ้างและสาขาที่จบ จะดูได้จากตารางที่ ๒๑.๓ ๒๑.๔ ๒๑.๕ และ ๒๑.๖

ในเรื่องการคัดเลือกผู้สำเร็จอาชีวศึกษาเข้าทำงานและความสามารถในการทำงานของผู้สำเร็จอาชีวศึกษานั้น นายจ้างส่วนใหญ่มีความเห็นว่าไม่มีปัญหาต่อคำถามที่ว่าหลักสูตรด้านอาชีวศึกษาสอดคล้องกับความต้องการของหน่วยธุรกิจของตนหรือไม่ คำตอบที่ได้รับจากนายจ้างส่วนใหญ่แสดงว่าหลักสูตรใช้ได้

ประเด็นที่ ๕ เป็นลักษณะของหน่วยธุรกิจในเรื่องลูกจ้างซึ่งเราได้แยกหน่วยธุรกิจออกเป็น ๒ ประเภท คือ หน่วยธุรกิจที่จ้างผู้สำเรจอาชีวศึกษาและหน่วยธุรกิจที่ไม่มีผู้สำเร็จอาชีวศึกษาเป็นลูกจ้าง สิ่งที่เราพบเป็นอันดับแรกก็คือ หน่วยธุรกิจที่มีขนาดใหญ่นั้นจำนวนลูกจ้างโดยเฉลี่ยของหน่วยธุรกิจที่จ้างผู้สำเร็จอาชีวศึกษาจะมากกว่าจำนวนลูกจ้างโดยเฉลี่ยของหน่วยธุรกิจที่ไม่จ้างผู้สำเร็จอาชีวศึกษาเกือบ ๓ เท่า แต่สำหรับหน่วยธุรกิจขนาดกลางและขนาดเล็กนั้น มีลูกจ้างโดยเฉลี่ยพอ ๆ กันทั้ง ๒ ประเภทในอันดับที่ ๒ ที่เราพบก็คือหน่วยธุรกิจประเภทที่ไม่จ้างผู้สำเร็จอาชีวศึกษานั้นบรรดาลูกจ้างจะมีระดับการศึกษาต่ำกว่ามาก สำหรับรายละเอียดอื่น ๆ นั้น จะดูได้จากตารางที่ ๒๒.๑ ๒๒.๒ ๒๒.๓ ๒๒.๔

<u>หมายเหตุ</u>

ตารางที่ ๔.๑ ถึง ตารางที่ ๒๒.๔ รวม ๖๗ ตารางนั้น เป็นข้อมูลดิบเลขที่ได้จากการสำรวจของผู้วิจัยดังได้แจ้งในรายละเอียดของการวิเคราะห์แล้ว ตารางดังกล่าวจึงไม่ได้พิมพ์ที่มาเอาไว้

และสำหรับภาคผนวก (Appendix) ที่เกี่ยวข้องกับแบบสอบถามนั้น โครงการวิจัย คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์ ที่กรุณาพิมพ์เผยแพร่ให้มีความเห็นว่าไม่จำเป็นนัก จึงได้ตัดออก แต่ถ้าท่านผู้อ่านสนใจจะดูได้จากผู้วิจัย

A PRELIMINARY REPORT

ON

A STUDY OF EMPLOYMENT ASPECTS OF VOCATIONAL EDUCATION

IN THAILAND (1970-75)

INTRODUCTION

Since 1976, the share of government expenditures on vocational education has been substantially increased from the average of 10 percent of the national education budget in the previous period, to the new level of the average of 14 per cent, while total enrolments in this stream of education consists of only 1.0 to 1.5 per cent of all enrolments;[1] yet very little is known about the results of their training especially the employment aspect of these graduates. The main purpose of this study is to try to shed some light on general characteristics of vocational graduates in relation to their subsequent performance in job markets.

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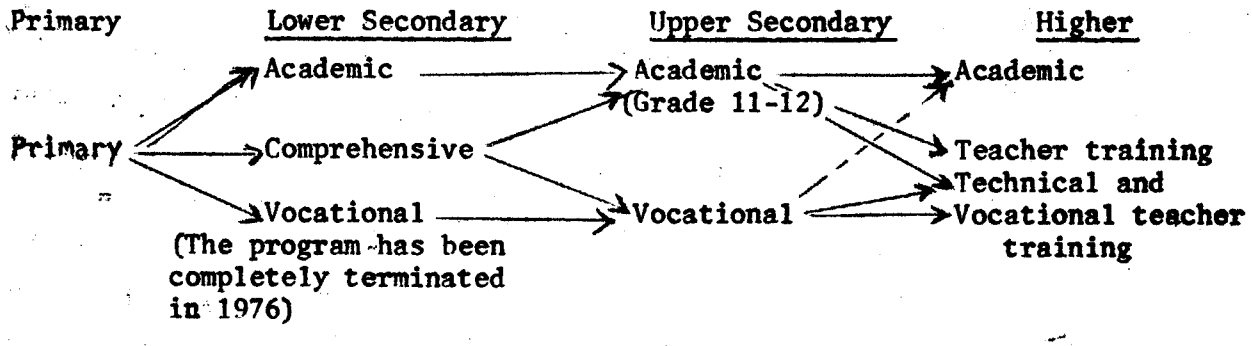
1 The whole educational system consists of primary education, lower secondary education (academic and vocational streams), upper secondary education (academic and vocational streams), technical education, teacher training and higher education. Vocational education included in this study covers lower secondary, upper secondary education of vocational streams plus technical training and vocational teacher training.

The Educational System in Thailand in 1975.



Sources of Information

Evidence analysed in this study has been drawn from three different sources ; Population Census in 1970 (P.C.70), Follow - up Studies of the Department of Vocational Education in 1971 and 1972. (F.S. 71 -72), and our own survey in 1975 (S.75). The P.C. 70 is of a stock nature containing the information of the distributions of vocational and technical graduates classified by their levels of education, sex, age, region, industry, profession, sector of employment, and employment status, The information has been made available by the National Statistical Office, Office of the Prime Minister through special request. Data drawn from this P.C.70 covers 17 major provinces out of the total 72 provinces in Thailand. These provinces are located in five regions in Thailand, the North, Northeast, Central Plain and the South. Provinces in the North are Cheingmai and Lampang, and those in the North-east are Ubon Ratchathani, Khonkaen, Udon Thani, Nakhon Ratchasima. In Central Plain are provinces of Nakornsawan, Ayuthia, Prathum Thani, Nonthaburi Smut Prakarn with the exception of Bangkok and Thonburi which have been combined into one capital city called Bangkok in 1972. The City of Bangkok is considered separately as a single unit and will not be included in the figure of a Central Plain. In the East the sample contains only the Province of Chonburi. Two provinces in the South are Nakorn Sithamarat and Songkhla, respectively. Data of these 17 provinces consist of 42.17 percent of total population; if proportional distribution of graduates in vocational and technical graduates to total number of population can be assumed. If not, the percentage of sample vocational graduates is likely to be higher than 42 since Provinces included in the sample are those larger ones in each region. It is more likely that higher vocational graduates/population ratio would be the case for these provinces. The actual sample probably contains more than 50 percent of vocational graduates.

The F.S. 71-2, only represent studies of a flow of new graduates each year. The results of these studies are published in the Annual Report of the Department of Vocational Education in 1972 and 1973. The surveys were conducted by the Department for each six months after students were graduated. The period is actually a too short period elapsed after students have been graduated to make any concrete conclusion about employment situation of these graduates. Nevertheless these surveys provide useful information in addition to that of the P.S.70. In the F.S.71-2, graduates are classified into five major tracks, agriculture, commerce, manufacturing and industry, home economics and arts. Information of starting earnings of vocational graduates employed in private sector is also available in this F.S.71-2.

The S.75 had been conducted during April to December, 1975. The S.75 covers the same set of Provinces drawn from the P.C.70. Samples of S.75 are classified into 8 different groups. The first three are final year students from comprehensive schools of lower secondary level (Mathayom Suksa 3 or MS.3), upper secondary level of vocational stream (Mathayom Suksa 6 or MS.6) and technical institutions (Diploma in Technical Education or DTE). These students were interviewed in questionnaires A,B,C, respectively (See Appendix A) Sample size for each of these three groups are 108, 101, and 114, respectively. Information from this group of students is of a flow nature. Information gained from this set of questionnaires concerns students' views on vocational education in comparison with academic education as a means for their future profession, their anticipation for future works and their comments on the trained programs.

The second three groups interviewed in questionnaires D and E (see Appendix A) are graduates of MS 3 (interviewed in form D) and graduates of MS 6 and DTE (interviewed in form E). Information gained from this set of samples is of a stock nature.

The purpose of interviewing these graduates is to obtain information pertaining to job markets, employment status, earnings (for further studies), and comments of these graduates on their trained curriculum. Observations interviewed in this second category were selected from lists of employees supplied by firms in selected provinces. Samples were stratefied by years of work experience in order to obtain meaningful earnings profiles after data have been tabulated. They were also stratified into 5 major educational tracks, agriculture, commerce, manufacturing and industry, home economics and arts. Sample size of 300 was planned to be selected for interview from the supplied list of employees for each group of graduates. However, because of these two theirs of stratification of samples plus the fact that the question of regional representation must also be taken into consideration, actual samples for each group of graduates was less than the planned figure.

The return samples for form D is 297, close to the plan figure of 300. However, such a considerably high return of the sample is only possible because stratification by educational tracks has finally been relaxed for this group of MS 3 graduates. Also finally stratification by educational stream (academic and vocational) was relaxed for this group of graduates because only few MS 3 vocational graduates were found during the survey. The situation reflects the fact that only a small percentage of the MS 3 graduates of the vocational stream had been produced each year (about 1.66 per cent of the total MS 3 students in 1966 were vocational students). Of this small percentage only a small fraction of them entered the job market. The rest of them either were out of the job market since their graduation or pursued higher levels of training. Also, because of the fact that the Thai government decided to terminate the MS 3 program of the vocational stream in 1976, not much would be gained from the study of this group of graduates. However, the MS 3 graduates in academic streams

interviewed in our sample are those who were employed in positions which require some vocational training skills. They could be more closely identified with MS 3 graduates in the vocational stream than that of graduates in the academic stream. This claim is validated by the fact that because of their vocational oriented work positions, many employers misclassified them as MS 3 vocational graduates in their supplied lists of employees.

Originally it was planned that a sample of 60 MS 6 graduates in each of the five different tracks of vocational education would be collected. However, the actual return consists of only 237 observations. The distribution is 23, 90, 66, 39 and 19 for graduates in agriculture, commerce, manufacturing and industry, home economics and arts repectively. The returns of observations of graduates in agriculture, home economics and arts was short of expectation. This is because a very small percentage of these graduates were employed in the private sector (public business oriented enterprises are also included in the so-called "private sector"). Combinations of different factors starting from the fact that the annual absolute number of graduates in agriculture and arts is quite low (913 and 395 in 1972 respectively) are among reasons explaining the low return. For graduates in agriculture although the P.C.70 figures reveal that about 96 per cent of graduates in this track in 1970 were employed in the private sector, these graduates could not be interviewed in the S.75, because the survey was mainly confined to the municipal area in each province. For graduates in arts, because of the sheer fact that the absolute number of graduates was so small to begin with and the percentage who pursued higher levels of their studies was so high (98.49 per cent in 1972 together with the fact that many of them would work independently, only few of them were found in the firms' lists of employees.

As for graduates in home economics, the problem was quite unique. Although substantial numbers of graduates from this track of education

has been graduates each year (1925 in 1972), due to the fact that the employment situation has never been quite favourable to them. Most of them keep on pursuing higher levels of education. A very small percentage has been employed in the private sector. Those who have not been employed or studied further would normally end up doing domestic work. Those who pursued higher levels of training would finally switch to teacher training and finally become teachers.

The lowest return is from the group of DTE graduates. Out of the planned number of 300 with the even distribution of 60 observations for graduates in each vocational track, only 138 observations were collected with the distribution of 16, 46, 39, 14 and 23 for those in agriculture, commerce, manufacturing and industry, home economics and arts respectively. Observe also that the proportion of these graduates found in our survey is quite consistent to the general pattern of MS 6 graduates in the respective tracks explained above. Returns from the group of DTE graduates in home economics is the lowest among the three (agriculture, home economics and arts). The group of DTE graduates in agriculture ranks the second from the lowest because of the fact that most of them have probably been employed outside municipal areas. The highest proportion of the DTE graduates in arts was found among the three because more of them were found to be in job markets in municipal areas at the DTE level than that of the MS 6.

The last two sets of questionnaires, F and G (see Appendix A) have been designed for interviewing employers' opinions, those who employ vocational and/or technical graduates (form F) and those who employ neither of them (form G). The main purpose for interviewing these two groups of employers is to find out the distinctive difference in the nature of their businesses, their opinions toward vocational and technical graduates and their reasons for employing or not employing them. A sample size of 182 classified into small and large firms

signified by the number of their employees ($x \leq 50, 50 < x \leq 200$, and $200 < x$) with the distribution of 100, 60 and 22 respectively, is collected in form F; and a sample size of 100 with the distribution of 77, respectively is collected in form G. Not many firms that employ more than 50 employees and employ neither vocational nor technical graduates are found in our study.

Some Substantial Findings

In general, the following results can be concluded from the overall findings:

(a) Most MS3 graduates from comprehensive schools would prefer to pursue their studies in higher levels of education if they could. At the same time, this idea has been supported by the fact that employers are also convinced that they have made a net marginal gain from employing graduates trained at higher levels of education given the present structure of pay-scale offered to graduates in different levels of education. Generally, employers find greater distinction in the difference in performance between the pair of graduates of higher levels of education (DTE and MS6) than that of the lower level (MS6 and MS3). However, it is not clear from this study to explain further, whether the difference in quality of performance of graduates between these two comparative pairs is due more to the contribution of a technical institution as a source of additional skilled formation or as a selective body of more able persons. Tentative conclusions at this point is that a technical institution probably performs both functions at the same time but we do not know which one carries more weight. This discreet preference of employers for higher levels of formally trained graduate is also confirmed by the findings of the FS 71-2 that between the two pairs (DTE and MS6, and MS6 and MS3) of graduates, the wage differential for the pair of higher levels of training (DTE and MS6) is higher with reference to the equal length in the difference of the training

period of the two pairs of graduates (3 years).

(b) Most graduates are unemployed during the age range of 15 to 24, which means that the majority of them are unemployed mostly at the time soon after their graduation. The average waiting period for those who only receive MS3 certificates before getting their first jobs is normally higher than those with higher levels of training. The overall average length of the waiting periods for the three groups of graduates (with the assumption that those who wait for their first job longer than the period of three years are abnormal cases) are 12.9, 8.7 and 6.2 months for MS3, MS6 and DTE graduates respectively. These results do not take into consideration of the fact that 12.5 per cent of MS3 graduates who were employed during the interviewed period had waited for more than 3 years for their first job, 4.29 percent of MS6 graduates did so, and none were found for the DTE graduates. This set of evidences support the rational decision for the MS3 graduates to push forward for higher levels of education.

(c) A higher percentage of male students tend to pursue higher levels of education than females. A higher percentage of female students is found to enter the job market by dropping out of their courses than that of their male counterparts. In absolute number, more male graduates are in job markets than that of female graduates (around 70,000 and 40,000 for male and female graduates in 1970 respectively) and absolute numbers employed in the public sector of both male and female graduates are higher than those employed in the private sector. Surprisingly, the private sector in Thailand employes a higher proportion of female graduates than the public sector (39.16 per cent of female graduates were employed in the private sector in 1970, while only 36.46 per cent were employed in the public sector).

(d) The P.C.70 figures reveal that 54 per cent of vocational and technical graduates were employed in the public sector while only 46 per cent were employed in the private sector. However, this

proportion may not represent the distribution of the true population since it is found in addition that a higher percentage of graduates employed in the private sectors only concentrated in major provinces in each region of Thailand ranging from those in the east, the south, the north, and the northeast. These are the majority of provinces covered in our studies. Taking Ubon Rathani where the percentage of graduates employed in the private sectors was the lowest (20.33 per cent in 1970) to be the upper limit for the proportion of graduates employed in the private sector in provinces excluded from our sample, the likely proportion of graduates employed in the private sector in the rest of the 55 provinces should be around 20 percent. If our sample contains over 50 per cent of the population, then the true distribution of the population of graduates employed in the public sector should be in the range of 65 to 70 per cent. If our sample contains 50 per cent of the population exactly, then the exact percentage of graduates employed in the public sector will be 67 per cent).

(e) The F.S. 71-2, indicates one common fact to the S.75, that the percentages of unemployed MS6 graduates in all educational tracks are consistently higher than those of DTE graduates. The average rate of unemployment of MS6 graduates who entered the job market in 1972 was 43.97 per cent, while the rate was only 17.99 per cent for the DTE graduates. These high rates of unemployment of graduates found in the survey six months after their graduation. In the light of the lengthy average rate of the waiting period for their first job found in the S.75 , these findings in the F.S.71-2 are naturally surprising. The average waiting period of MS6 graduates for their first job is 8.47 months. The period of six months is too short to record accurate unemployment figures of this group of graduates. The lower rate of unemployment of the DTE graduates is also consistent with the shorter average waiting period found in the S.75. However, readers should be reminded that figures in the F.S.71-2 are flows while those in S.75 are stocks. The consistency of the two different sets of information indicates little or no change in the overall employment structure of vocational and technical graduates.

However, within each track of education, the highest rates of unemployment for MS6 graduates were found among graduates in agriculture and home economics respectively (74.63 and 50.49 per cent in 1972). Although the rate of job participation for graduates in home economics was quite low (only 26.40 per cent of observed graduates) in 1972. The rate of job participation of graduates in agriculture for the same period was much higher (43.07 per cent in 1972). The overall findings for these two groups of graduates from the FS.71-2 are quite consistent with that of S.75, the highest average of the waiting period of graduates before getting their first jobs, are 12.4 and 11.0 months for MS6 graduates in agriculture and home economics respectively. The medium average length of the waiting period is 8.1 and 7.6 for MS6 graduates in commerce and manufacturing and industry respectively, while the FS.71-2 unemployment figures for these groups of students indicates 39.82 and 31.79 per cent for the graduates in manufacturing and industry and commerce respectively. There is a slight reversal in ranking order of the two groups between the studies (FS.71-2 and S.75). However, the lowest rate of unemployment and the lowest waiting period found in the two studies are also the same for the group of arts graduates. Again, the consistency of the two findings indicates little structural change in the job markets of the MS6 graduates.

Little inconsistency between the two studies is found among those of DTE graduates. While the overall ranking of the average waiting period and percentage of unemployment of DTE graduates in different tracks does not vary from that of the MS6 graduates greatly. The FS.71-2 indicates a rather high rate of unemployment of the DTE graduates in commerce (24.96 per cent in 1972, while the highest rate of unemployment for the DTE graduates in agriculture in the same year was only 29.33 per cent). At the same time, the average waiting period for this group of graduates found in S75 was only 4.5 months, the lowest average among the five groups. Nevertheless, the FS.71-2 shows consistent results between its first findings and its other findings in the difference in salary range. The difference in average salary range

between DTE and MS6 graduates in manufacturing and industry in 1972, is 514.51 baht (1431.20-898.69) while that of the commerce graduates is only 297.76 baht (1237.75-939.99). The lower salary range between that of the commerce graduates indicates little difference in the quality of performance graduates in commerce at MS6 and DTE levels in the eyes of employers. This fact probably explains the recent trend of the relatively high unemployment rate among technical graduates in commerce. If this interpretation of the above statistical facts is correct, it then means that there is a substantial change in a new trend in a market structure of DTE graduates in commerce.

(f) It has been found in addition in the S75, that there is a substantial difference between the nature of firms that employ and that do not employ vocational and technical graduates. The ones which do not employ vocational graduates are those which employed workers of lower levels of education intensively (those who only have primary education and no formal education at all). The average percentage of workers employed in this category by this type of firm is as high as 87.21 per cent of total employees, while the figure for those who employ vocational and technical graduates is only 52.11 per cent. For firms that do not employ vocational and technical graduates, this percentage is smaller for a smaller firm and larger for a larger firm. This fact indicates in addition that larger firms in this category are just the multiplication of small-sized firms, with no difference whatsoever in their production technique. The average firm size found in the S75 for firms of this category are those who have 16, 87, and 338 employees, for small, medium, and large firms respectively. Reasons given by owners of these firms for not employing vocational or technical graduates confirm the general characteristics of this type of firm given above, namely; their firms do not need educated workers but require a great deal of skill from work experience. Vocational and technical graduates are those who probably know enough theory but have little practical

experience, the qualities which are not very useful for their business. They also explain the fact that their firms are quite small and they want to save their wage bill by not employing vocational graduates. Employers also complain about the fact that vocational graduates tend to be choosy on the kinds of work that they prefer to do, these graduates do not have enough patience for the kind of work that they have been assigned and tend to be less obedient than those who have less education. However, about 6 per cent of employers report that they do want to employ a vocational graduate but none of them have been approached for jobs by these graduates.

On the other hand, those who employ vocational and technical graduates are firms of different characters. The average employees of a small firm in this category found in the S75 is the one that only has the total of 13 employees, yet two of them are vocational graduates and one of them is a technical graduate. Vocational graduates in the track of commerce are more often employed as clerks. Firms of their nature can be more or less classified into tertiary industry.

The average medium firm size in this category is the one that employs the average of 90 employees. It shares one similar nature to the one that does not employ vocational or technical graduates, namely, both of them tend to be firms that produce tangible goods. Consequently, they must employ relatively large percentages of workers with low-level educational training. While the average percentage of workers with primary education and lower employed by firms in this category is only 52.11, the average percentage of employees in this group for a medium-size firm in this category is as high as 61.21 per cent. Although a large percentage of vocational graduates employed in this firm category are those in commerce track, numbers of graduates in manufacturing and industry and agriculture are also employed. Although the majority of them are still employed as clerks, some of them are employed as supervisors, assistant supervisors, shop-stewards and executives. In general, the firm in this category is better organized than that of

the other and its production technique must be entirely different from the one of the other category. These medium-size firms should be classified more or less in the secondary industry.

The large firm size in this category is that which employs the average of 970 employees. It tends to be more mechanical and technologically oriented than that of the medium-size one. A higher percentage of graduates in manufacturing and industry are employed in this average large-sized firm. A higher percentage of vocational graduates are employed as shop-stewards while lower percentages are employed as clerks in comparison with that of the medium-size.

As already mentioned earlier firms that employ vocational and technical graduates tend to indicate their proference for graduates with higher educational training background than those with lower educational qualifications. Of course, as we have already pointed out, there is also variation in different tracks of training. Technical training in manufacturing and industry would be definitely better than that in commerce in comparison with those with lower levels of formal training in each respective field.

Comments on the Findings

If the consistent part of the findings from the three different sources of information is acceptable, namely; from the point of view of vocational and technical students, graduates who are employees, and employers, the result is almost unanimous that more formal vocational and technical training is definitely better than less with some variation among different tracks of training. And also, firms that tend to employ more vocational and technical graduates are small firms in the tertiary industry and medium and large, organized and mechanized firms in the secondary industry. Evidence also

indicates that graduates in agriculture are employed largely in the primary sector, the largest sector in Thailand. Yet unemployment figures among this group of graduates is the highest, the fact which already indicates the present situation of the over supply of graduates in agriculture in Thailand. Without radical change in farming technology in Thailand, it is hardly conceivable that more supplies of graduates in this track is justified. It is also found that judging from employment aspects alone, graduates in home economics perform rather poorly in job markets. Lastly, there seems to be a structural change in the job market of graduates in commerce, namely, the MS6 graduates in commerce is now catching up with the net marginal gain previously enjoyed bythe DTE graduates in this track.

If all these findings are generally agreeable, and the following list of assumptions can be assumed;

(i) the Thai economy is heading toward major developments in a secondary industry with emphasis given to medium and large organized and mechanized firms, accompanied by the rapid expansion of small firms in a tertiary industry and allowing a primary sector to remain as it is now;

(ii) graduates are evaluated by their performance in job markets only: then, the following set of recommendations can be made:

(i) Emphasis should be given to the production of graduates with higher levels of educational training than what has been achieved before. A higher proportion of DTE graduates should be more preferable to that of the MS6 graduates and that of the MS6 should be more preferable than the MS3's. The exception of this general recommendation is for graduates in commerce, namely, the demand for the DTE graduates in this track of education does not seem to be overwhelmingly greater than that of the MS6 graduates. The same proportion in the production of graduates in this track of education at both levels should be maintained.

(ii) Increased production of graduates in agriculture and home economics at the MS6 level should be discouraged.

(iii) Presently, the demand for graduates in arts at the present wage structure in job markets for this group of graduates at both MS6 and DTE levels is still substantially higher than the supply of graduates. Increased production of graduates in this area should be encouraged.

One among many other weaknesses of this analysis is that it has no solid criteria in making a precise recommendation on how many more or less graduates of different levels of education in different tracks should be produced. The other weakness of this analysis is also that no information of costs and benefits for graduates of different levels of education and in different tracks in terms of both private and social return is analysed. It has been the original plan of this study to incorporate costs/benefits analysis into this study but time and resources do not permit us to do so.

Moreover, the assumption about the new direction for the Thai economy to head toward as assumed in this study is not likely to be a viable route for the future Thai economy to travel. One must realize that a primary industry, the most substantial industry for the Thai economy, cannot be left out the way it is presently. The backward linkage theory that encourages tha expansion of secondary industry in order that this sector would finally trickle the pull effect back to the primary industry within the country are weakened by the fact that purchasing power of those in the primary industry is quite limited. Successful expansion of markets for products from secondary industry in the third world countries can only be done successfully through the efficient organization of mult-national firms or trans-national cooperations. However, the most wicked aspect of these trans-national cooperations is that they would not normally plough enough profit back into the exploited countries as to cause any pull effect

back to the primary industry. Even worse still, trans-national cooperations tend to support suppressive ruling regimes in the third world countries so that their exploitative machineries could be maintained permanently.

On this basis of factual analysis, if the Thai economy is to be viable in the long run, the realistic approach for the country to take is to encourage national economic independence. The only way to achieve this objective is to encourage small units of farming using labour intensive devices and technology developed from local available resources. Secondary industry should be developed from cottage or household industries and agro-industries which link agricultural products directly to basic industrial products such as food preservation, and other related modified agricultural products. The expansion of tertiary sectors should not receive much emphasis.

If the Thai economy is actually heading toward this new direction, the nature of vocational and technical training in Thailand must be changed drastically. If farming must be conducted in numerous small units, there will be no need for highly trained graduates in agriculture but a lot of practical agricultural trainees at the level of MS3 and less. All those cottage or household industries and agro-industries would be more closely identified with firms that do not employ vocational graduates found in our study. If this is the case, the restructure in the training methods of vocational and technical education is needed in order to meet the demand from these numerous firms. More practical training should receive greater emphasis. Also, more emphasis should be placed on the innovation of simple technology that can easily be adopted by the existing firms or production units through the alteration of materials available domestically. The present method of training in manufacturing and industry and commerce would not be relevant to the suggested new direction of the Thai economy. There would be an immediate question on what should have been done with the training personnel and facilities currently available in order to gear them into a more useful purpose in a new direction.

What has been suggested so far is not meant to suggest the only alternative available for the future Thai economy. However, it intends to give a word of warning for researchers in this area not to blindly assume the existing economic structure and the direction at which the contemporary economy is trying to achieve, then only make suggestion for minor corrections based on information narrowly designed for specific purposes from the existing economic structure.

Should a study of this nature have any value for real application, an ideal model of the future economy must be clearly settled; and the analysis that would subsequently be followed must be geared to serve the common alternate objective. Otherwise, the suggested minor correction would only help to perpetuate the existence of the present economic structure which probably moves in the direction of the ultimate dead end.

A final word of caution in interpreting the results from this study is that readers should be alerted to the fact that many significant factors that probably have considerable impact on the results of our study have been deliberately left out. To mention a few of them, overall economic conditions that may have significant impact on the rate of unemployment of different groups of graduates within the boundary of each analytical period included in this study are one of the major factors which have been left out. Institutional wage structures resulting from the distribution of job markets between those of the public and private sectors with respect to its impact on students' decisions whether to continue their education or participate in the existing job market, the critical factor that has significant impact on the rate of unemployment of graduates, have not been analysed throroughly. Another factor that has also been completely left out from this study is family background of students and graduates. Family background may have considerable impact on the choice of subjects selected by students, and probably one of the decisive factors determining employment status and the average waiting period for the first jobs of graduates soon after their graduation.

After all the weaknesses of this study are taken into accounts, detailed figures to be presented in the following sections are just a matter of recorded facts within the frame of reference mentioned above. Findings from the three sources of information, P.C.70, FS71-2 and S.75 will be presented in a chronological order starting from the P.C.70, FS72-3 and S75, respectively.

FINDINGS FROM THE 1970 POPULATION CENSUS (P.C.70)

General Observations

The P.C.70 only classifies vocational graduates by levels of their education and not by the tracks of their studies. The sample drawn from the population of graduates in 17 major provinces in all regions in Thailand consists of 101,711 observations. Total number of population living in the said 17 provinces in 1970 is 14,504,644 or 42.17 percent of the population of Thailand in 1970. The vocational and technical graduates in 1970 represent 0.71 per cent of total population in those provinces. Employment data of graduates are classified into those who participate in job markets and those who do not. Those who participate in job markets are classified into employment and unemployment. Those who do not participate in job markets are classified into domestic workers, students, and others which included disabled perbled persons, Buddhist monks and novices, pensioners and those in military services. Actual figures of the distribution of vocational and technical graduates classified by levels of their education are shown in Table 1.1

The highest percentage of those who participate in job markets is found among MS.3 and over MS 6 graduates (80.88 and 85.43 per cent, respectively, See Table 1.2). The low rates of job participation are found among MS.4 to MS.6 graduates. (The rates range from 12.83 to 16.31 per cent). The majority of those who do not look for jobs are mostly students in schools especially the MS.4 to MS. 6 graduates.

Most of the M.S. 3 and over M.S. 6 graduates are in the job markets, which a large proportion of those who are not in the job markets are domestic workers.

The average rate of unemployment for all graduates is 8.80 per cent . The lower rate of employment is found among the MS.4-5 graduates where the rate is only 5.21 per cent. The lowest rate of unemployment of this group of graduates can probably be explained by the fact that the majority of them probably are willing to be employed in the position available for the MS.3 graduates. The highest rate of unemployment is found among the MS.6 graduates where employers probably do not attribute much difference in their training than that of the MS.3 graduate. Consequently, many of these graduates pursue higher levels of education. Many of those who must look for jobs are unemployed (17.23 per cent)

Comparison of figures is also made between graduates in the capital or principal district (the district that contains the biggest municipal area within each province) and the rest of them. The main purpose of this classification is to find out whether there is any regional difference in the rate of unemployment for those in "big" cities and the smaller ones. The results are shown in Table 1.4 to 1.6. The overall rates of unemployment between the two groups are not significantly different. The rates of unemployment of graduates classified by levels of education do not indicate any distinctive pattern between the two. However, it can be generally observed that the rate of unemployment at the MS.4-5 levels in "small" cities is lower than that of the "big" cities, while the rate at the levels of MS.6 and over in the "small" cities is higher than that of the "big" cities. This outcome probably indicates that in "small" cities, the job markets for higher educated manpower is more limited than that of the "big" cities. Nonetheless for practical purposes we could conclude that there is no significant regional effect on the distribution in the rates of unemployment between that in"big" cities and smaller ones.

The next step, we would like to observe whether there is any difference in the rates of unemployment between male and female graduates. Classification is made between male and female graduates and also by the level of education and region. The results are shown in Table 2.3. It is found again here that in general there is no regional difference in rates of unemployment between that of "big" cities and "small" ones. However, difference in sex does have an impact on the rates of unemployment. The rate of unemployment of male graduates is only 7.55 per cent while the rate of female graduates is as high as 10.78 per cent. However, there is an interaction effect caused by sex and region on the rates of unemployment classified by different levels of education. For example, for the MS.3 graduates, the rates of unemployment of female graduates in "big" cities is lower than that of the male graduates while the rate for female graduates in "small" cities for female graduates is higher than that of the male graduates, whereas the rates of unemployment for male graduates remain almost the same for both regions. This outcome could probly be explained by the fact that, in "big" cities, employers tend to give a secretarial-type job to female graduates. Therefore the rate of unemployment of the MS.3 female graduates in "big cities is quite low (3.67 per cent). However, the high rate of unemployment (10.17) per cent) of MS.3 female graduates in "small" cities must be explained by a different set of reasoning.

First of all, secretarial jobs available in "small" cities should not be as many as those in "big" cities. However, this is a necessary but not sufficient condition. The other factor explaining this outcome is that, in general, female graduates normally drop out from schools at MS.4-5 levels for jobs more than that of the males. This situation is clearly confirmed by figures in Table 2.1 where the absolute number of female graduates at this level of education is higher than that of the males, even though overall female graduates is only 75.40 per cent of male graduates.

The reason for the fact that more female students drop out from school for jobs at MS.4-5 levels can be explained by few factors.

Firstly, because of the cultural factor, female students may not have greater insipiration for higher education to compete for positions available for male graduates. Many of those who continue after finishing MS.3 do so because they could not find jobs right away. As soon as jobs are found, they would be willing to leave school for jobs. Secondly, also resulting from a cultural factor, inccase that parents must choose to provide financial support either to their daughter or son, the son normally has the priority. Thirdly, education is greatly affected by love affairs and sexual relationships. The impact from this affair on education of female students is usually greater than that of male students. Consequently, the rate of dropouts of female students during this critical age is much higher than that of the male students.

After leaving school, these female school leavers (graduates) must look for jobs, and in general, they will accept the positions given to MS.3 graduates. Since these female graduates have a little more formal training thain the MS.3 graduates, they do not have much difficulty in competing with MS.3 graduates for positions available to them. As a result, the rate of unemployment of the MS 4-5 female graduates is quite low (3.73 per cent). In "small" cities positions available for MS.3 female graduates are normally taken by these MS 4-5 female graduates. Therefore, the rate of unemployment of MS 3 female graduates in "small" cities turns out to be quite high (10.17 per cent) while the rate for MS 4-5 female graduates in the same region is the lowest (3.51 per cent). The pattern of unemployment of MS 6 female graduates is similar to the situation of MS 3 female graduates and can probably be explained by the same set of reasoning.

After thorough investigating the effect of education, sex and region on employment, we can conclude at this point that levels of education and sex do affect directly the rate of unemployment of vocational and technical graduates, while regional difference has

only little impact on the rate of unemployment of graduates. However when sex and regional difference are simultaneously considered with the level of education, their interaction effect could produce significant impact on the rate of unemployment of these graduates.

Sectorial, Indistrial and Professional Distribution

In order to simplify the analysis and to bring out some distinctive characters of vocational and technical graduates employed in distinctive economic sectors and industries, only two economic sectors and three industries are differentiated, namely, public and private sectors, and primary secondary and tertiary industries. Graduates are also classified into six professional groups. The first four groups of professional, executive, clerk, trader,farmer, fisherman, hunte miner, etc., are lumped into one professional group. The last professional group consists of transporter, mechanic, labourer, and service person, etc. The results in absolute number are shown in Table 3.I.

In general, tertiary industry employs the highest proportion of graduates, followed by, secondary industry and primary industry respectively. This ranking order of employment by sector is the same for both public and private sectors. Although, the public sector employ higher proportion of graduates than that of the private sector. there are variation in proportion of employment between the two sectors. While more graduates are employed in the tertiary industry in the public sector, private sector employs more graduates than public sector in secondary and primary and primary industries.

In primary industry public sector only employs 14.29 percent of total graduates while the private sector employs the rest of them. Also in secondary industry, private sector employs as high as 52.76 percent of vocational and technical graduates. (See Table 3.4). This fact indicates quite clearly that the increase in employment of

these graduates depends largely on the expansion of private sectors in the two industries. However, only firms of specific nature in these two industries that require services of vocational and technical graduates (the point that has already been discussed before).

Table 3.2 shows percentage distribution of graduates classified by professions in different industries. It is found in general that, the majority of graduates employed as professionals, executives, clerks and traders is employed in tertiary industry. The majority of those who are employed as, transporters, mechanics, mechanics, labourers and service persons is employed in secondary industry and the majority of those employed as farmers, fishermen, hunters and miners is employed in primary industry. This finding seems to be quite consistent for those employed in both public and private sectors. The difference is only the degree of magnitude. While the difference in professional distinction in different industries is quite clear-cut in the private sector, it is not so in the public sector. The reason explaining this fact is because the public sector is more or less a service oriented sector. Most of its employees are geared to produce intangible services. Therefore professional distinction of employees employed in the other two industries in the public sector are not quite distinctively distributed according to industrial requirement.

Table 3.3 shows professional distribution within each industry. The results indicate again that within a primary industry, graduates who are employed as farmers, fishermen, hunters and miners are the only dominant group. Professional distribution of graduates employed in secondary industry indicates the highest percentage (43.59) in the profession of transporters, mechanics, labourers and service persons. However, clerks and executives also share substantially high percentages in this industry (37.01 and 13.27) respectively). In the tertiary industry clerks are the dominant group (44.99 percent)

followed by professionals and executives. However, among the two sectors (public and private), the professional distributions of graduates within this industry coincide with the pattern of overall distribution in all cases with the exception of those who are employed as executives and professionals in each sectoral distribution. The rest seem to follow the pattern of overall distribution with great variation in degree of magnitude.

In this tertiary industry, while 58.74 percent of graduates are employed as clerks, 18.45 percent as professionals and 5.02 percent as executives in the private sector; in the public sector the following percentages of 36.15, 26.64 and 27.39 are employed respectively. The differences in pattern of the two distributions indicate the fact that promotion from clerks to executives of vocational and technical graduates in the private sector is more difficult than that of the public sector. It is also the fact that the chance for graduates to be established as professionals in the public sector is also higher than that in the private sector. This factor probably serves as the alternative incentive for vocational and technical graduates to decide to work with the public sector in preference to the money incentive given by the private sector. At this point, family background should play a significant role in graduates' decision on whether they want to be employed in public or private sectors. A factor that is completely left out from this study.

In secondary industry, while highest percentage (52.58) of graduates in the private sector are employed as transporters, mechanics, labourers, and service persons, the largest group employed in public sector in this industry is clerks (45.74 percent). The difference can be explained by a nature of an intangible service circulation of the public sector, as already mentioned before. The similar case is also found in professional distributions of graduates between the two sectors within primary industry.

Percentage of professional distribution of graduates employed in public and private sectors classified by industry is shown in Table 3.4.

In the primary industry, more graduates are employed in all professional classifications in the public sector except in the professions of farmers, fishermen, hunters and miners where almost 90 percent of graduates are employed in the private sector. In the secondary industry, higher percentage of graduates are found in the public sector in the professions of executives and clerks. For the rest of the professions in this industry, private sectors employ a higher percentage of graduates. In tertiary industry, 51.04 percent and 99.05 percent of graduates are employed as clerks and traders, respectively, in the private sector. The rest of the professions, higher percentages are employed in the public sector.

As classification by sex is introduced, it is found in addition that, in general a proportion of female graduates employed in the private sector is higher than that in the public sector. With the exception of secondary industry, private sector employ a relatively higher proportion of female graduates than the public sectors in all other industries (See Table 4.2)

Professional distribution of graduates employed in different industries classified by sex is shown in Table 5.2 and Table 5.3. In general, there is no significant difference in the pattern of professional distributions of male and female graduates employed in the primary industry. In the secondary industry, however, among female graduates, the highest percentage (63.06) are employed as clerks while the highest percentage of male graduates are employed as transporters, mechanics, labourers and service men. The other distinctive characteristic of the two distributions (male and female) is that relatively smaller percentage of female graduates are employed as executives while 15.30 per cent of male graduates are employed in this profession in the secondary industry. In tertiary industry the distributional pattern between male and female graduates in professions of clerks and executives is almost the same as that in the secondary industry with the exception

that this time higher percentages of female graduates are employed as professionals. This probably leads to the conclusion that in the area of service, women profess more in their profession than men. This outcome also probably reflects the fact that female graduates are employed as professionals more in the public sector than male graduates. Figures in Table 5.3 can be used to support this latter argument. In the primary and secondary industries, higher percentages of male graduates are employed in all professions. However, in the tertiary industry where the public sector is the dominant sector, a higher percentage of female graduates are employed as professionals and clerks. The major occupational group in professional is a teacher. This fact indicates further that a high proportion of female graduates are in the teaching profession, which belongs to the public sector.

Tables 6.1-6.4 show regional distribution of the proportion of graduates employed in public and private sectors. Table 6.1 shows the distribution of graduates in different regions in absolute number, classified into groups of "big" and "small" cities. In Table 6.2 it is shown in general that higher percentages of graduates are employed in the public sector in all regions with the exception of Bangkok where the opposite is true. Also, relatively higher percentages of graduates are employed in the public sectors in "small" cities in all regions with the exception of the South where the sample of "small" cities has been influenced by a figure of district of Haadyai, which is actually much larger than the capital district of Songkhla. In this case a "small" city is in fact much larger than a "big" city. Therefore, the result from the South turns out to be in opposite to the rest of them, which in fact should be agreeable to the general conclusion. It should be noted also that mining is one of the main industries in the South and most mines are outside the capital district of the province. This latter fact, if it carries enough weight, would support the exceptional result to the general pattern of regional distribution of graduates employed in the public and private sector.

While the overall average of graduates employed in the private sector is 46.00 per cent of total graduates, the average of that in "big" and "small" cities are 40.57 and 47.73 respectively. Table 6.3-6.4 shows ranking distribution of those above and below average classified by region, and province repectively.

TABLE 1.1

VOCATIONAL AND TECHNICAL GRADUATES

CLASSIFIED BY LEVEL OF EDUCATION AND

EMPLOYMENT STATUS (1970)

Level of Education	Participating in Job Markets			Not Participating in Job Markets				Total
	Total	Employment	Unemployment	Total	Domestic Workers	Students	Disable and Others	
M.S.3	1,468	1,351	117	347	151	172	24	1,815
M.S. 4-5	2,496	2,366	130	16,959	242	16,619	98	19,455
M.S.6	3,111	2,575	536	15,969	328	15,542	99	19,080
Over M.S.6	52,419	47,968	4,451	8,942	3,631	4,386	925	61,361
Total	59,494	54,260	5,234	42,217	4,352	36,719	1,146	101,711

Source : National Statistical Office, Office of the Prime Minister, 1970 Population & Housing Census.

TABLE 1.2

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY LEVEL OF EDUCATION AND EMPLOYMENT STATUS (1970)

Level of Education	Job Participation		Employment Status		Not in Job Markets			Total
	Participating in Job Markets	Not Pariticipating in Job Markets	Employment	Unemployment	Domestic Workers	Students	Disable and Other	
M.S.3	80.88	19.12	92.03	7.97	43.52	49.57	6.91	100.00
M.S.4-5	12.83	87.17	94.79	5.21	1.43	98.00	0.57	100.00
M.S.6	16.31	83.69	82.77	17.23	2.05	97.33	0.62	100.00
Over M.S.6	85.43	14.57	91.51	8.49	40.61	49.05	10.34	100.00
Total	58.49	41.51	91.20	8.80	10.31	86.98	2.71	100.00

Source : National Statistical Office, Office of the Prime Minister

TABLE 1.3

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY LEVEL OF EDUCATION AND EMPLOYMENT STATUS IN TOTAL AGGREGATION (1970)

Level of Education	Participating in Job Markets			Not Participating in Job Markets				Total
	Total	Employment	Unemployment	Total	Domestic Workers	Students	Disable and Others	
M.S.3	80.88	74.44	6.45	19.12	8.32	9.48	1.32	100.00
M.S. 3-4	12.83	12.16	0.67	87.17	1.24	85.42	0.50	100.00
M.S.6	16.31	13.50	2.81	83.69	1.72	81.46	0.52	100.00
Over M.S.6	85.43	78.17	7.25	14.57	5.92	7.15	1.51	100.00
Total	58.49	53.35	5.15	41.51	4.28	36.10	1.13	100.00

Source : National Statistical Office, Office of The Prime Minister.

TABLE 1.4

VOCATIONAL AND TECHNICAL GRADUATES IN
CAPITOL OR PRINCIPLE DISTRICTS (BIG CITIES) CLASSIFIED
BY LEVEL OF EDUCATION AND EMPLOYMENT STATUS (1970)

Level of Education	Participating in Job Markets			Not Participating in Job Markets				Total
	Total	Employment	Unemployment	Total	Domestic Workers	Students	Disable and Others	
M.S.3	279	262	17	102	46	48	8	381
M.S.4-5	530	494	36	3,730	58	3,644	28	4,260
M.S.6	790	672	118	3,807	101	3,665	41	4,597
Over M.S.6	12,701	11,637	1,064	2,258	915	1,113	230	14,959
Total	14,300	13,065	1,235	9,897	1,120	8,470	307	24,197

Source : National Statistical Office, Office of the Prime Minister

TABLE 1.5

VOCATIONAL AND TECHNICAL GRADUATES IN OTHER DISTRICTS(SMALL CITIES)CLASSIFIED BY LEVEL OF EDUCATION AND EMPLOYMEN STATUS(1970)

Level of Education	Participating in Job Markets			Not Participating in Job Markets				Total
	Total	Employment	Unemployment	Total	Domestic Workers	Students	Disable and Others	
M.S.3	1,189	1,089	100	245	105	124	16	1,434
M.S.4-5	1,966	1,872	94	13,229	184	12,975	70	15,195
M.S.6	2,321	1,903	418	12,162	227	11,877	58	14,483
Over M.S.6	39,718	36,331	3,387	6,684	2,716	3,273	695	46,402
Total	45,194	41,195	3,999	32,320	3,232	28,249	839	77,514

Source : National Statistical Office, Office of the Prime Minister

TABLE 1.6

PERCENTAGE DISTRIBUTION OF EMPLOYMENT STATUS OF VOCATIONAL AND TECHNICAL GRADUATES IN BIG AND SMALL CITIES CLASSIFIED BY LEVEL OF EDUCATION (1970)

Level of Education	Big Cities		Small Cities		Total
	Employment	Unemployment	Employment	Unemployment	
M.S.3	93.91	6.09	91.59	8.41	100.00
M.S.4-5	93.21	6.79	95.22	4.78	100.00
M.S.6	85.06	14.94	81.99	18.01	100.00
Over M.S.6	91.62	8.38	91.47	8.53	100.00
Total	91.36	8.64	91.15	8.85	100.00

Source : National Statistical Office, Office of the Prime Minister

TABLE 2.1

VOCATIONAL AND TECHNICAL GRADUATES
CLASSIFIED BY LEVEL OF EDUCATION,
EMPLOYMENT STATUS AND SEX (1970)

Level of Education	Employment Status					
	Total		Employment		Unemployment	
	Male	Female	Male	Female	Male	Female
M.S.3	946	552	875	467	71	46
M.S.4-5	808	1,688	741	1,625	67	63
M.S.6	1,994	1,117	1,719	856	275	261
Over M.S.6	32,851	19,604	30.467	17,501	2,348	2,103
Total	36,563	22,931	33.802	20.458	2,761	2,473

Source : National Statistical Office, Office of the Prime Minister

TABLE 2.2

VOCATIONAL AND TECHNICAL GRADUATES IN BIG AND SMALL CITIES CLASSIFIED BY LEVEL OF EDUCATION, EMPLOYMENT STATUS, AND SEX (1970)

Level of Education	Big Cities						Small Cities					
	Employment Status						Employment Status					
	Total		Employment		Unemployment		Total		Employment		Unemployment	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
M.S.3	170	109	157	105	13	4	776	413	718	371	58	42
M.S.4-5	181	349	161	333	20	16	627	1,339	580	1,292	47	47
M.S.6	528	262	459	213	69	49	1,466	855	1,260	643	206	212
OverM.S.6	8,315	4,386	7,713	3,924	602	462	24,500	15,218	22,754	13,577	1,746	1,641
Total	9,194	5,106	8,490	4,575	704	531	27,369	17,825	25,312	15,883	2,057	1,942

Source : National Statistical Office

TABLE 2.3

PERCENTAGE OF UNEMPLOYMENT OF VOCATIONAL AND TECHNICAL GRADUATES IN "BIG" AND "SMALL" CITIES CLASSIFIED BY LEVEL OF EDUCATION, AND SEX (1970)

Level of Education	Total		Big Cities		Small Cities	
	Male	Female	Male	Female	Male	Female
M.S.3	7.51	8.12	7.65	3.67	7.47	10.17
M.S. 4-5	8.29	3.73	11.05	4.58	7.50	3.51
M.S.6	13.79	23.37	13.07	18.70	14.05	24.80
Over M.S.6	7.16	10.27	7.24	10.55	7.13	10.78
Total	7.55	10.78	7.66	10.40	7.52	10.89

Source : National Statistical Office

TABLE 3.1

VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY INDUSTRY AND PROFESSION (1970)

Profession	Industry				
	Primary	Secondary	Tertiary	Unclassified	Total
Public Sector					
Professionals	6	379	5,910	139	6,431
Executive	17	961	6,076	18	7,072
Clerk	17	3,060	8,024	19	11,120
Trader	-	3	13	12	28
Farmer Fisherman Hunter, Miner,etc.	23	5	6	23	51
Transporter, Mechanic Laboures,Service Person,etc.	-	2,285	2,157	148	4.590
Sub-total	63	6,690	22,186	359	29,298
Private Sector					
Professional	1	420	2,626	215	3,262
Executive	4	859	714	212	1,789
Clerk	6	2,016	8,362	1,925	12,309
Trader	-	15	1,351	217	1,583
Farmer Fisherman Hunter, Miner	671	21	-	6	698
Transporter, Mechanic Laboures-Service Person	4	3,693	1,183	441	5,321
Sub-Total	686	7,024	14,236	3,016	24,962
Professional	7	796	8,536	354	9,693
Executive	21	1,820	6,790	230	8,861
Clerk	23	5,076	16,386	1,944	23,429
Trader	-	18	1,364	229	1,611
Farmer Fisherman Hunter, Miner	694	32	-	29	75
Transporter, Mechanic* Laboures-Service Person	4	5,978	3,340	589	9,911
Sub-Total	749	13,714	36,422	3,375	54,260

TABLE 3.2

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY PROFESSION IN TERMS OF INDUSTRY DISTRIBUTION (1970)

Industry	Public Sector							Private Sector			
	Total	Professional	Executive	Clerk	Trader	Farmer, Fisherman, Hunter, Miner, etc.	Transporter Mechanic Labourer, Service Person, etc.	Total	Professional	Executive	
Primary	0.21	0.10	0.24	0.16	-	40.35	-	2.75	0.03	0.22	0.05
Secondary	22.83	5.84	13.59	27.51	10.72	8.77	49.78	28.14	12.88	48.22	16.37
Tertiary	75.73	91.90	85.92	72.15	46.43	10.55	46.99	57.03	80.50	39.91	67.93
Unclassified	1.23	2.16	0.25	0.18	42.86	40.55	3.22	12.08	6.59	11.85	15.65
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office. Office of the Prime Minister

TABLE 3.2 (Continued)

Industry	Private Sector			Total						
	Trader	Farmer, Fisherman, Hunter, Miner,etc.	Transporter, Mechanic Labourer, Service Person,etc.	Total	Professional	Executive	Clerk	Trader	Farman, Fisherman, Hunter, Miner,etc.	Transporter, Mechanic Laboures Service Person,etc.
Primary	-	96.13	0.08	1.38	0.07	0.25	0.10	-	91.92	0.04
Secondary	0.95	3.01	69.40	25.27	8.21	20.54	21.67	1.12	4.24	60.32
Tertiary	85.34	-	22.23	67.12	88.06	76.63	69.93	84.67	-	33.70
Unclassified	13.71	0.86	8.29	15.65	3.65	2.60	8.30	14.21	3.84	5.94
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office. Office of the Prime Minister

TABLE 3.3

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY INDUSTRY IN TERMS OF PROFESSIONAL DISTRIBUTION (1970)

Profession	Industry				
	Primary	Secondary	Tertiary	Unclassified	Total
Public Sector					
Professional	9.53	5.62	26.64	38.72	21.95
Executive	26.98	14.36	27.39	5.01	24.14
Clerk	26.98	45.74	36.15	5.29	37.95
Trader	-	0.05	0.06	3.34	0.10
Farmer, Fisherman Hunter, Miner etc.	36.51	0.07	0.03	6.40	0.19
Transporter, Mechanic Labourer, Service Person, etc.	-	34.16	9.72	41.23	15.67
Sub-total	100.00	100.00	100.00	100.00	100.00
Private Sector					
Professional	0.15	5.98	18.45	7.13	13.07
Executive	0.58	12.23	5.02	7.03	7.17
Clerk	0.87	28.70	58.74	63.83	49.31
Trader	-	0.21	9.49	7.19	6.34
Farmer, Fisherman Hunter, Miner, etc.	97.81	0.30	-	0.20	2.80
Transporter, Mechanic Labourer, Service Person, etc.	0.58	52.58	8.31	14.62	21.32
Sub - total	100.00	100.00	100.00	100.00	100.00
Professional	0.93	5.80	23.45	10.49	17.86
Executive	2.80	13.27	18.65	6.81	16.33
Clerk	3.07	37.01	44.99	57.60	43.18
Trader	-	0.13	3.74	6.79	2.97
Farmer, Fisherman Hunter, Miner, etc.	92.66	0.23	-	0.86	1.39
Transporter, Mechanic Labourer, Service Person, etc.	0.53	43.59	9.17	17.45	18.27
total	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office, Office of The Prime Minister

TABLE 3.4

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN DIFFERENT INDUSTRIES CLASSIFIED BY PROFESSION IN TERMS OF SECTORAL DISTRIBUTION (1970)

Industry \ Profession		Professional	Executive	Clerk	Trader	Farmer, Fisherman Hunter, Miner, etc.	Transporter, Mechanic, Labourer Service Person, etc.	Total
Primary	Public	85.71	80.95	73.91	-	3.31	-	8.41
	Private	14.29	19.05	26.09	-	96.69	100.00	91.59
	Total	100.00	100.00	100.00	-	100.00	100.00	100.00
Secondary	Public	47.23	52.80	60.28	16.66	19.23	38.22	48.78
	Private	52.76	47.20	39.72	83.34	80.77	61.78	51.22
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tertiary	Public	69.23	89.48	48.96	0.95	100.00	64.58	60.91
	Private	30.76	10.52	51.04	99.05	-	35.42	39.09
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Unclassified	Public	39.26	7.82	0.97	5.24	79.31	25.13	10.64
	Private	60.74	92.18	99.03	94.76	20.69	74.87	89.36
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total	Public	66.34	79.81	47.46	1.74	7.55	46.31	54.00
	Private	33.66	20.19	52.54	98.26	92.45	53.69	46.00
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office, Office of the Prime Minister

TABLE 4.1

VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY SEX AND INDUSTRY (1970)

Sector	Industry	Primary	Secondary	Tertiary	Unclassified	Total
Public	Male	53	4,798	13,541	224	18,616
	Female	10	1,892	8,645	135	10,682
	Sub-total	63	6,690	22,186	359	29,298
Private	Male	5 14	5,806	7,165	1,701	15,186
	Female	172	1,218	7,071	1,135	9,776
	Sub-total	686	7,024	14,236	3,016	24,962
Total		749	13,714	36,422	3,375	54,260

Source : National Statistical Office, Office of the Prime Minister

TABLE 4.2

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY INDUSTRY IN TERMS OF SEXUAL DISTRIBUTION (1970)

Industry / Sector	Primary		Secondary		Tertiary		Unclassified		Total	
	male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Public	84.13	15.87	71.72	28.28	61.03	38.97	62.40	37.60	63.54	36.46
Private	74.92	22.07	82.66	17.34	50.33	49.47	56.40	43.60	60.84	39.16

Source : National Statistical Office, Office of the Prime Minister

TABLE 5.1

VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN DIFFERENT INDUSTRIES CLASSIFIED BY SEX AND PROFESSION (1970)

Profession	Industry				
	Primary	Secondary	Tertiary	Unclassified	Total
Male					
Professional	4	605	3,597	203	4,409
Executive	17	1,623	5,472	192	7,304
Clerk	14	3,115	7,835	867	11,831
Trader	-	17	1,016	192	1,225
Farmer, Fisherman, Hunter Miner, etc.	528	23	4	25	580
Transporter, Mechanic, Laboures Service Person, etc.	4	5,221	2,782	446	8,453
Total	567	10,604	20,706	1,925	33,802
Female					
Professional	3	191	4,939	151	5,284
Executive	4	197	1,318	38	1,557
Clerk	9	1,961	8,551	1,077	11,598
Trader	-	1	348	37	386
Farmer, Fisherman, Hunter Miner, etc.	166	3	2	4	175
Transporter, Mechanic, Labourer, Service Person, etc.	-	757	558	143	1,458
Total	182	3,110	15,716	1,450	20.458

TABLE 5.2

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY SEX AND INDUSTRY IN TERMS OF PROFESSIONAL DISTRIBUTION (1970)

Profession	Industry				
	Primary	Secondary	Tertiary	Unclassified	Total
Male					
Professional	0.71	5.71	17.37	10.55	13.04
Executive	3.05	15.30	26.43	9.97	21.61
Clerk	2.46	29.38	37.84	45.04	35.00
Trader	-	0.16	4.91	9.97	3.62
Farmer, Fisherman, Hunter Miner, etc.	93.12	0.22	0.02	1.30	1.72
Transporter, Mechanic Labourers, Service Person, etc.	0.71	49.23	13.43	23.17	25.01
Total	100.00	100.00	100.00	100.00	100.00
Female					
Professional	1.65	6.14	31.42	10.41	25.83
Executive	2.20	6.33	8.39	2.62	7.61
Clerk	4.94	63.06	54.41	74.28	56.69
Trader	-	0.03	2.21	2.55	1.88
Farmer, Fisherman, Hunter Miner, etc.	91.21	0.10	0.10	0.28	0.86
Transporter, Mechanic Laboures, Service Person, etc.	-	24.34	3.55	9.86	7.13
Total	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office, Office of the Prime Minister

TABLE 5.3

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN DIFFERENT INDUSTRIES CLASSIFIED BY PROFESSION IN TERMS OF SEXUAL DISTRIBUTION(1970)

Industry \ Profession		Professional	Executive	Clerk	Trader	Farmer, Fisherman Hunter, Miner, etc.	Transporter, Mechanic, Laboure, Service Person, etc.	Total
Primary	Male	57.14	80.96	60.87	-	76.09	100.00	75.70
	Female	42.86	19.04	39.13	-	23.91	-	24.30
	Total	100.00	100.00	100.00	-	100.00	100.00	100.00
Secondary	Male	77.69	89.18	61.37	94.44	88.47	87.34	77.32
	Female	22.31	10.82	38.63	5.56	11.53	12.66	22.68
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tertiary	Male	42.14	80.59	47.82	74.49	66.67	83.32	56.85
	Female	57.86	19.41	52.18	25.51	33.33	16.68	43.15
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Unclassified	Male	57.34	83.48	44.60	83.84	86.21	75.72	57.04
	Female	42.66	16.52	55.40	16.16	13.79	24.28	42.96
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total	Male	45.49	82.43	50.50	76.04	76.82	85.29	62.30
	Female	54.51	17.57	49.50	23.96	23.18	14.71	37.70
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : National Statistical Office, Office of the Prime Minister

TABLE 6.1

VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY REGION AND DISTRICT (1970)

Region	Capital or Principal District			Other District			Total		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Bangkok	1,785	1,974	3,759	16,223	17,105	33,328	18,008	19,079	37,087
Central Plain*	1,885	1,214	3,099	2,293	1,292	3,585	4,178	2,506	6,684
North	1,318	847	2,165	633	270	903	1,951	1,117	3,068
Northeast	2,186	976	3,162	1,688	452	2,140	3,874	1,428	5,302
South	591	289	880	696	543	1,239	1,287	832	2,119
Total	7,765	5,300	13,065	21,533	19,662	41,195	29,298	24,962	54,260

* Chonburi Province in the East is included in Central Plain.

Source : National Statistical Office, Office of the Prime Minister

TABLE 6.2

PERCENTAGE DISTRIBUTION OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN PUBLIC AND PRIVATE SECTORS CLASSIFIED BY REGION AND DISTRICT (1970)

Region	Capital or Principal District			Other Districts			Total		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Bangkok	47.49	52.51	100.00	48.68	51.32	100.00	48.56	51.44	100.00
Central Plain*	60.83	39.17	100.00	63.69	36.04	100.00	62.51	37.49	100.00
North	60.68	39.12	100.00	70.71	29.90	100.00	63.59	36.41	100.00
Northeast	69.13	30.87	100.00	78.88	21.12	100.00	73.07	26.93	100.00
South	67.16	32.84	100.00	56.17	43.83	100.00	60.74	36.26	100.00
Total	59.43	40.57	100.00	52.27	47.73	100.00	54.00	46.00	100.00

* Chonburi province in the East is included in Central Plain.

Source : National Statistical Office, Office of the Prime Minister

TABLE 6.3

REGIONAL RANKING ORDER OF AVERAGE PERCENTAGE OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN THE PRIVATE SECTOR CLASSIFIED BY DISTRICT (1970)

Capital or Principal District Average = 40.57		Other Districts Average = 47.73		Total Average = 46.00	
Above Average	Below Average	Above Average	Below Average	Above Average	Below Average
Bangkok (52.51)	*Central Plain (39.17)	Bangkok (51.32)	South (43.83)	Bangkok (51.44)	*Central Average (37.49)
	North (39.12)		*Central Plain (36.04)		North (36.41)
	South (32.84)		North (29.90)		South (36.26)
	Northeast (30.87)		Northeast (21.12)		Northeast (26.93)

* Chonburi province in the East is included in Central Plain

Source : National Statistical Office, Office of the Prime Minister

TABLE 6.4

PROVINCIAL RANKING ORDER OF AVERAGE PERCENTAGE OF VOCATIONAL AND TECHNICAL GRADUATES EMPLOYED IN THE PRIVATE SECTOR CLASSIFIED BY DISTRICT(1975)

Capital or principal District average = 40.57		Other Districts average = 47.73		Total average = 46.00	
Above Average	Below Average	Above Average	Below Average	Above Average	Below Average
Smut Prakan (58.78)	Nakorn Sithamarat (36.81)	Bangkok (55.52)	Nakorn Sithamarat (46.50)	Bangkok (55.59)	Nakorn Sithamarat (42.37)
Bangkok (56.43)	Nakorn Sawan (36,45)	Smut Prakarn (58.78)	Songkhla (40.94)	Smut Prakarn (55.09)	*Thonburi (41.08)
*Thonburi (49.16)	Nonburi (29.39)	Chonburi (50.04)	*Thonburi (40.18)	Chonburi (50.30)	Cheingmai (39.81)
Chonburi (48.84)	Songkhla (28.11)		Cheingmai (32.36)		Lampang (39.39)
Udon Thani (46.29)	Nakorn Ratsima (27.71)		Nakorn Sawan (32.28)		Udon Thani (36.86)
Cheingmai (44.35)	Ayuthia (26.35)		Nakorn Ratsima (30.99)		Songkhla (35.77)
Lampang (42.67)	Khonkaen (24.73)		Lampang (29.00)		Nakorn Sawan (34.14)
	Pitsanuloke (23.35)		Ayuthia (27.25)		Nakorn Ratsima (28.76)
	Ubon Rathani (25.15)		Pra Thani (27.17)		Ayuthia (26.87)
	Prathum Thani (20.00)		Pitsanuloke (21.49)		Prathum Thani (25.25)
			Nonburi (19.64)		Nonburi (25.24)
			Khonkaen (19.49)		Pitsanuloke (22.97)
			Ubon Rathani (17.46)		Khonkaen (22.93)
			Udon Thani (16.06)		Ubon Rathani (20.33)

*Thonburi is taken as different province from Bangkok in this Table.

Source : National Statistical Office, Office of the Prime Minister

FINDINGS FROM THE FOLLOW-UP STUDIES 1972-73 (F.S. 71-2)

In F.S. 71-72 comparison of performance of graduates in job markets are classified into three comparable groups. The first classification is made by level of their education; the second is by the track of study; and the last one is by programmes of study. No classification by sex of graduates has been made in these studies. In the first survey of the Department of Vocational Education in September 1971, no classifications by track and programmes of study of graduates have been made. Therefore the analyses by the later two classifications of graduates are based on the 1972 survey results only.

It should be mentioned at this point that a few years back, the Ministry of Education has established a loan programme from the I.B.R.D. (International Bank for Reconstruction and Development) for the purpose of improving training facilities and the standard of training in the track of agriculture. Its ultimate objective has been to extend the loan programme to cover all agricultural colleges operated presently under the regular programme. By 1972, all trainees at the VTT level in agriculture were already under the loan program, and only small fractions of the DTE level was still under the regular program. At the M.S.6 level, the loan programme already covered 53 percent of total enrolments in agricultural colleges in 1972.

In comparison with that in agriculture, the loan programme for students in manufacturing and industry has been relatively recent. In 1972, the loan programme only covered about 31 percent of total enrolments of the M.S.6 students in this track of study. The percentages were 5 and 30 for those at the DTE and VTT levels respectively in the same year. The VTT level of education of both tracks of study (agriculture and manufacturing and industries) has received special encouragement because, it was the prime objective of the Thai government then to encourage the expansion of vocational training in order to support, hopefully, the policy to increase the rate of expansion of primary and

secondary industries in the country. The other three tracks of study did not receive similar support from the government. Therefore, the loan programme has only been confined to the two tracks of study since then.

By 1972, the colleges under the loan programme had already produces substantial numbers of graduates. It has been one of the purposes of the Department of Vocational Education to find out about the general performance of graduates from colleges under the loan programme in comparison with those from the regular programme. This is mainly the reason for the programme classification in this study. Since the information on earnings of graduates employed in the public sector from the 1972 survey is also available, this information should be analysed together with other variables within each group of classification. Readers should be reminded again that information in this part of study is a flow, and each of the two surveys in the F.S,71-2 was conducted six months after students were graduates, a too short period for a solid conclusion on employment status of graduates. It should be remembered also that these surveys were based on the response of graduates from the mailing questionaires. There could be some systematic bias among those who responded and those who did not. Expecially among those who did not respond, there could be many reasons explaining the possible systematic biases in the studies. It could be because they were ashamed to report their unemployment or they had moved from their last adresses while they were students to resume new student status elsewhere or to look for jobs or to take up the offered positions in other provinces. Information about the nonrespondents has not yet been clearly known. Therefore, all these shortcomings in the method of studies must be taken into consideration as results are analysed and intrepreted.

It should be noted also that the concept of unemployment in the F.S. 71-2 is slightly different than that of the P.C.70. For the F.S. 71-2 graduates who continue their education are only counted as those who do not participate in job markets. Those who take up domestic work

and disabled persons together with other unclassified categories are counted as the unemployed in the F.S.71-2 Actually, two sets of figures (P.C.70 and F.S.71-2) are not compatible because of the fact that one is a stock and other is a flow. However, if they were of the same nature, they still would not be competible because the concept of unemployment used in the F.S.71-2 covers groups of people who should not be normally defined as the unemployed (domestic workers, disables persons and etc.) Nevertheless, within the short interval (six months) after students have been graduated, the percentage of those who should not be treated as the unemployed should not be significantly large to cause any serious defect on the general conclusion.

Classification by Level of Education.

In general the 1971 and 1972 figures (Tables 7.2 and 8.2) indicate consistent patterns of percentage distributions of job participation, employment status and sectoral employment of graduates. The lowest rate of job participation is found among the M.S.6 graduates, followed by that of the M.S.3 and DTE graduates. The highest rate of job participation is found among the vocational teacher training (VTT) graduates. The lowest rate of job participation among the M.S.6 graduates results from the fact that more than 50 percent of graduates at this level would prefer to pursue higher levels of education. However, the relatively higher rate of job participation found among the M.S.3 graduates is because those who decided to take the vocational stream of education since the lower secondary level have more or less committed to work soon after their graduation. Many of them cannot continue their education after graduation because of the limitation in the learning ability or their financial difficulty. The DTE graduates more or less anticipate to enter the job markets soon after their graduation because it is a terminating level in technical education. Consequently, the rate of job participation for this group of graduates in quite high (the two year average is close to 80 percent).

The highest rate (the two year average is higher than 85 per cent) is, of course, found among the VTT graduates who by the type of their training, must be committed to employment soon after their graduation, especially, position as teachers in government vocational institutions. As the result, we should expect the high rate of employment among this group of graduates, especially in the public sector.

It should be noted that the rate of job participation for the MS 3 graduates in the 1971 figure is not consistent to be what has just been explained. However, the results from this set of samples cannot be highly reliable since its percentage is so small (only 38.66 per cent whereas that in 1972 is 92.92 per cent). Nor, the result from the 1971 findings for this group of graduates is consistent with the general findings from the P.C.70.

Because of the small sample size of the 1971 figures of this group of the M.S.3 graduates the unusually high rate of unemployment is also detected and other unsystematic patters of sectoral employment is also found from this group -of graduates. Fortunately, because of the smallness of the sample size for this group of graduates the overall results have not been significantly affected by this sample. It should be observed also that, the largest number of graduates in absolute terms is that of the M.S.6 graduates. Therefore- figures of overall average of vocational and technical graduates would be highly influenced by the general characteristics of the figures of this group of graduates.

The next consistent set of findings is that the rate of unemployment is highly correlated with the level of education in a negative way, namely, the higher level of education the lower rate of unemployment, (See Tables 7.2, and 8.2). This result confirms the similar finding in the P.C. 70. However, it is founded in the F.S. 71-2 in addition, that there is a tendency for the average rate of unemployment of vocational and technical graduates to increase each year. The average rate

of unemployment of the 1971 graduates is 28.41 percent while the rate is 35.59% in 1971. The rates of unemployment of graduates in 1972 are consistently higher than those of the 1971's for all groups of graduates with the exception of the unusually high rate of unemployment of the M.S.3 graduates in 1971 for the reason explained earlier.

The other consistent pattern found in this classification is that the rate of employment in the public sector is positively correlated with the level of education, namely, the higher level of education the higher percentage of graduates employed in the public sector. This result supports the finding of the negative relationship between the rate of unemployment and level of education explained earlier. Because of the limitation of positions available in the public sector for graduates at lower levels of education in comparison with numbers of graduates from these educational levels. These graduates do not have any alternative but to depend more on job markets in the private sector. Normally, job markets in the private sector is more competitive than those in the public sector. As a result, many of them would finally be unemployed. Again, there is an exception for the figure of the M.S.3 graduates in 1971 to this general tendency for the reason already explained.

Another interesting result found in this part of study is that although the average of stock figures of the P.C. 70 indicates 46 percent of graduates employed in the private sector. We believe that this figure is the over estimate of the true population since we are convinced that the true population is closer to 30 percent, and the flow figure of the F.S. 71-2 indicates the average of 45.81 per cent. Again, it should be noted that the percentage of employment in the private sector of the M.S.3 graduates in 1971 is unusally low. Nevertheless, the figure shows a systematic pattern of the increasing trend of graduates employed in the private sectors. The 1972 figure indicates even higher percentage of graduates employed in the private sector (55.32 percent).

This part of the findings indicates the increasing reliance of the vocational and technical graduates for jobs in the private sector since positions in the public sector do not increase at the rate that matches the rapid rate of increase in absolute number of graduates. The marginal net increment of graduates must be absorbed by the private sector job market. Since job markets in the private sector are more competitive, an increasing rate of unemployment is also found among these groups of DTE and VTT graduates.

Earnings of graduates found from the 1972 survey conforms very well with the rate of unemployment of graduates. For the M.S.3 and M.S.6 graduates where their rates of unemployment are quite high, the difference in the average salaries between the two groups is quite low. (832.52 to 905.26 baht in 1972 see Table 8.1). On the other hand, the difference in the average salaries between the M.S.6 and DTE graduates, where the difference in their rates of unemployment is quite substantial, is quite high (905.26 to 1,315.52 baht). For the VTT graduates where their rate of unemployment is the lowest, their average salary in the private sector is the highest. Not much difference in salary scale between this group ofgraduates and the DTE graduates is observed because it is more or less a different stream in training while the length of training period is the same for both groups of graduates.

Classification by Track of Study.

At the M.S.3 level, only two groups of graduates were produced namely those in manufacturing and industry and home economics. Total observations of this group of graduates are dominated more by those in manufacturing and industry since their number is larger and the percentage of job participation of this group of graduates is much higher than the other one. While 62.94 percent of M.S.3 graduates in manufacturing and industry participate in job markets, only 17.09 percent of graduates in home economics do so. In spite of the low

rate of job participation the rate of unemployment of this latter group of graduates in 1972 is still quite high. It was as high as 60 percent. This fact alone probably explains the low rate of job participation of this group of graduates. No job positions in the public sector are available for this group of graduates either. (See Table 8.4). As a result, earnings of the M.S.3 graduates in home economics in the private sector in 1972 is as low as 600.00 baht, while that of the graduates in manufacturing and industry is as high 860.29 baht or about more than 40 percent higher (See Table 8.3). The general findings from those two groups of graduates are within the framework of reasoning explained above. This is the first solid evidence for the poor performance in the job markets of graduates in home economics.

For the M.S.6 graduates, about 50 per cent of graduates in agriculture, commerce and manufacturing and industry participated in job markets in 1972. While the rates were quite low for graduates in home economics and arts (29.96 and 1.51 per cent respectively (See Table 8.6). However the reasons for such low rates of job participation are different between the two groups of graduates. For those in home economics, the reasons are similar to those discussed earlier, but the reason for that of the arts graduates is more related to professional requirement for their jobs, since non of them who participate in job markets are unemployed and their average rate of salary in the private sector is among the highest. (See Table 8.5).

The rates of unemployment of graduates at this level of education are highest among graduates in agriculture and home economics (64.94 and 50.49 percent respectively), while the rate of those in commerce with the exception of the ones in arts is the lowest (31.79 per cent) followed by that of manufacturing and industry graduates (39.00 per cent; - see Table 8.6). In relative terms, graduates in home economics at this level of education perform marginally better than that of the M.S.3 graduates in the same track. At this level of education, there

are positions in the public sector available for them. However, graduates in agriculture depend more on positions available in the public sector; 73.33 of them were employed in this sector in 1972. Because of the limitation of job markets for M.S.6 graduates in agriculture, the rate of unemployment for this group of graduates is among the highest. At the other extreme, the M.S.6 graduates in commerce depend very little on job markets in the public sector; 87.75 of them were employed in the private sector in 1972. The situation for this group of graduates is quite exceptional for reason explained above about the general nature of job markets.

The highest percentage of employment of this group in the private sector does not result from the fact that there are not enough positions for them in the public sector, since the rate of unemployment of this group of graduates is among the lowest. As a matter of fact, they do not need to depend on job markets in the public sector. They have been bit away from the public sector by the private sector. For graduates in manufacturing and industry, the general situation is similar to that of the commerce graduate with slightly different degrees of magnitude.

In terms of overall average earnings of these graduates, most of them received the average earnings of more than 900 baht per month in 1972 with the exception of those graduates in home economics whose average salary was way below the average (about 650 baht in 1972, see Table 8.5). It should be observed at this point that, the average salary of graduates in agriculture was the highest (956.18 baht). It was so in spite of their high rate of unemployment because, the majority of them were employed in the public sector with a fixed scale. Those who were unemployed would not be willing to work for less in the private sector since they still had their options of whether waiting for other vacant positions in the government or pursuing higher levels of study. Therefore the result for this group of graduates turns out to be as that observed.

As for the DTE graduates, the rates of job participation for most groups of graduates are quite high (the average of 85 percent) because most of them realize that this level of education is more or less their intended terminating level. Nevertheless, because of the condition of unfavourable job markets for graduates in home economics, their rate of job participation is only 26 percent. At this level of education graduates in manufacturing and industry seem to do much better than all other groups of graduates with the exception of arts graduates who appear to perform equally well.

With the exception of graduates in arts whose rate of unemployment is zero, the rate of unemployment of the DTE graduates in manufacturing and industry is the lowest. (11.02 percent; see Table 8.8). In terms of earnings, the average salary of graduates in this track of study in the private sector was also the highest (1411.14 baht; for the rest of them, their average salary was only around 1200 baht (in 1972). Graduates in agriculture increasingly depend on employment in the public sectors, 81.13 percent of them work with the public sector. However, this time they do not have much option left except to try to get jobs; they can no longer bargain for higher wages, therefore, their average salaries in the private sector in 1972 was about the same as that of other average groups.

Graduates in commerce at this level of education do not perform as well in the job markets as the M.S.6 graduates. The rate of unemployment among this group of graduates is the highest (35.52 per cent in 1972). They still depend more on the job markets in the private sector. However, the reason for their poor performance in job markets at this level of education is because they must compete with University graduates who are better qualified in their similar trade as that of the DTE graduates in commerce. These university gradautes would offer their services in the private sector for not much higher an average wage than that of the DTE graduates. [The rate paid to University graduates in commerce by the

private sector during that period ranged from 1300 - 1500 baht.)

Graduates in home economics perform poorly as ever in the job markets. Although their rate of unemployment this time is not the highest (23.40 percent in 1972), it is so because their average earnings are way below the general average (it was about 1000 baht in 1972). Again, in relative terms, their performance has been slightly improved from the M.S.6 graduates of the same track. Higher percentages of them are employed in the public sector.

For the VTT graduates, the pattern is quite clear, majority of them must intend to be teachers before they enter this stream of education. As a result, high percentage of graduates in this stream of education are in the public sector. This includes graduates in commerce as well. However, for this stream of education, the observations for groups of graduates in commerce and home economics are too small - to make any meaningful conclusion from the computational results.

Among the remaining three groups, unemployment among graduates in agriculture is still the highest. Curiously, the percentage of their employment in the public sector is lower than the M.S.6 and DTE graduates in the same track. At the same time their average salary in the private sector is the highest (1500 baht in 1972). The curious outcomes for this group of graduates can probably be explained more by the fact that the the sample size is too small to make any reasonable inference from the figures.

Graduates in manufacturing and industry in this stream of education still perform consistently well by the standards mentioned before. However, their overall performance is slightly poorer than that of the DTE graduates in the same track. The rate of unemployment, although relatively low, is still higher than the rate of unemployment of the DTE graduates (the rate is 16.62 for the VVT graduates, see Table 8.10) and their average salary in the private sector is slightly lower than

that of their counter parts (the average of 1368.13 baht in 1972; see Table 8.9).

In terms of employment, graduates in arts perform consistently well all the way through. No unemployment is found among this group of graduates for all levels of their education, although their financial gains are not always at the top. Since absolute numbers of graduates in this track of education is still quite small (the total of 733 for all levels of education, and since the number participated in the job market is even much smaller (about 320 in 1972), increase in number of enrolments in this track of study at all levels of education should be desirable.

Classification by Programme of Study.

Finally we would like to make an attempt on the comparison of the overall performance between graduates from colleges under the loan programme and those from the regular programme. As far as the results from the available figures reveal, there seems to be no definite conclusion on which is better than the other.

One common finding for the M.S.6 graduates in both tracks (agriculture and manufacturing and industry) is that the rate of job participation of those under the loan programme is lower than that of the regular programme. This fact seems to indicate that students under the loan programme have better opportunity for education. However this fact can be explained by different reasons, either directly related to the programme itself or not directly relating to the programme at all. For example, because of the fact that students under the loan programme are better trained and equipped, they have better chance to pursue higher levels of education. At the same time, it is equally true that because of the fact that colleges under the loan programme are those that normally provide higher levels of training, it is therefore easier for these groups of M.S.6 graduates to pursue higher levels of training in the same colleges. It is also equally possible that colleges under the loan program are

those located in big provinces where parents of students are more financially able on the average, to support their children to pursue high levels of education. If the latter two reasons are the case, the loan programme only affects the low rate of job participation indirectly.

However, when the comparison of average salary is made (see Tables 8.11 and 8.12) the M.S.6 graduates under the loan programme of both tracks of education seems to perform better than that of the regular program. Nevertheless, such outcome cannot be hastily concluded that graduates under the loan programme perform better than those from the regular programme, because figures also indicate higher rates of unemployment of graduates under the loan programme in both tracks. (see Table 8.12 and 8.14). The higher rate of unemployment of graduates under the loan programme in both tracks probably reflects higher chances for them to continue having their study option available. Also, because they might well be in a better financial position than those under the regular programme, therefore, they can bargain for higher average salaries.

When percentages employed in the private sector is taken into account it is found that higher percentages of graduates under the loan programme in both tracks are employed in the private section. Therefore this fact probably negates the statement made earlier partially. All in all,with the available set of information, one may conclude that the M.S.6 graduates in both tracks of study under the loan programme perform in the job markets marginally better than those from the regular programme.

For the DTE graduates in agriculture, comparison between the two groups of graduates (under loan and regular programmes) is not possible since the sample size of those under the regular program is so small (only 28, see Table 8.11). However, if attempts are made, it will be found that graduates under regular programs perform better for all criteria for comparison advanced earlier. The rate of job participation of graduates under the regular programme is higher and the rate of unemployment is much lower and a much higher percentage of this

group of graduates is employed in the private sector, and their average salary is also higher than those under the loan programme. (See Tables 8.11 and 8.12). However this fact prabably reflects specific characteristics of this block of graduates in this particular year (1972). If such is the case, generalization of this result will not be valid. But if it is not so, there will be serious doubt on the conclusion made earlier about the performance of the M.S.6 graduates under the loan programme. Comparison of the VTT graduates in agriculture between the two programmes is not possible because no regular programme is available at this level of education.

For the DTE graduates in manufacturing and industry, the sample size of those graduates under the loan programme is not as large (only 89 in 1972; see Tables 8.13 and 8.14). Nevertheless it is not as small as that of the DTE graduates in agriculture. With the same set of criteria for the judgement, graduates under the regular programme seems to perform better in all aspects. (Also, see Tables 8.13 and 8.13). With the two sets of evidence about both DTE graduates in agriculture and manufacturing and industry, we can probably conclude that the DTE graduates under the regular programme are marginally better than those under the loan programme. Again, by the same set of criteria the VTT graduates in manufacturing and industry under the loan programme seem to perform better in the job markets than those under the regular programme.

What has been observed so far, seems to indicate that the track of study has little effect on the performance of students graduated from colleges under different programmes, while the level of education seems to matter. And if this is the case, we can move one step further to conclude that the M.S.6 graduates under the loan programme seem to perform marginally better in the job market than those from regular programme and the reverse is true for the DTE graduates, while the opposite outcome is the case for the VTT graduates in manufacturing and industry. Our final verdict in this regard is that shaky results

concluded from one set of observations (in terms of historical data) is certainly not sufficient to make any valid conclusions about the behaviour of the true population. Therefore more investigation about performance in job markets of graduates from colleges under the two programmes must be made further if the question posed earlier requires a definite answer.

TABLE 7.1

RESULTS FROM THE FOLLOW-UP STUDY OF VOCATIONAL AND TECHNICAL GRADUATES GRADUATED IN 1971 CLASSIFIED BY LEVEL OF EDUCATION AND EMPLOYMENT STATUS BY SECTOR

Level of Education	Number of Graduates	Number of Observations	Participating in Job Markets					Student
			Total	Employment			Unemployment	
				Total	Public Sector	Private Sector		
M.S.3	1,208	467	99	28	16	12	71	368
M.S.6	13,355	8,128	2,924	1,764	840	1,160	1,160	5,204
DTE	3,466	2,080	1,588	1,394	735	194	194	492
VII*	1,110	534	451	438	373	13	13	83
Total	19,139	11,209	5,062	3,624	1,964	1,438	1,438	6,147

* Vocational Teacher Training
Date of the Survey : September 1, 1971
Source : Department of Vocational Education. The 1972 Annual Report

TABLE 7.2

PERCENTAGE DISTRIBUTIONS OF VOCATIONAL AND TECHNICAL GRADUATES GRADUATED IN 1971 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS AND SECTOR OF EMPLOYMENT CLASSIFIED BY LEVEL OF EDUCATION

Level of Education	Percentage of Samples Size	Participating in Job Markets	Not Participating in Job Markets (Student)	Total	Employment	Unemployment	Total	Public Sector	Private Sector	Total
M.S. 3	38.66 (467)	21.20	78.80	100.00	28.28	71.72	100.00	57.14	42.86	100.00
M.S. 6	60.86 (8,128)	35.97	64.03	100.00	60.33	39.67	100.00	47.62	52.38	100.00
DTE	60.01 (2,080)	76.35	23.65	100.00	87.78	12.22	100.00	52.73	47.27	100.00
VTT*	48.11 (534)	83.06	15.29	100.00	97.12	2.88	100.00	85.16	14.84	100.00
Total	58.57 (11,209)	45.16	54.84	100.00	71.59	28.41	100.00	54.19	45.81	100.00

* Vocational Teacher Training
Date of the Survey : September 1, 1971
Source : Department of Vocational Education, The 1972 Annual Report

TABLE 8.1

RESULTS FROM THE FOLLOW-UP STUDY OF VOCATIONAL AND TECHNICAL GRADUATES GRADUATED IN 1972 CLASSIFIED BY LEVEL OF EDUCATION EMPLOYMENT STATUS By SECTOR AND SALARY IN PRIVATE SECTOR

Level of Education	Number of Graduates	Number of Observations	Participating in Job Markets					Student	Salary in Private Sector (in baht)
			Total	Employment			Unemployment		
				Total	Public Sector	Private Sector			
M.S.3	565	525	277	116	42	74	161	248	832.15
M.S.6	14,944	10,573	4,821	2,764	1.082	2,057	2,057	5,752	905.26
DTE	4,375	2,259	1,845	1,495	732	350	350	414	1,315.52
VTT*	842	537	472	401	277	71	71	65	1,349.60
Total	20,726	13,894	7,415	4,776	2,133	2,639	2,639	6,479	1,042.50

* Vocational Teacher Training
Date of the Survey : September 1, 1971
Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.2

PERCENTAGE DISTRIBUTIONS OF VOCATIONAL AND TECHNICAL GRADUATES GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS AND SECTOR OF EMPLOYMENT CLASSIFIED BY LEVEL OF EDUCATION

Level of Education	Percentage of Sample Size	Participating in Job Markets	Not Participating in Job Markets (Student)	Total	Employment	Unemployment	Total	Public Sector	Private Sector	Total
M.S.3	92.92 (525)	52.76	47.24	100.00	41.88	58.12	100.00	36.21	63.79	100.00
M.S.6	70.75 10,573)	45.60	54.40	100.00	57.33	42.67	100.00	39.15	60.85	100.00
VE	51.63 (2,259)	81.67	18.33	100.00	81.03	18.97	100.00	48.96	51.04	100.00
VTT	63.78 (537)	87.90	12.10	100.00	84.96	15.04	100.00	69.08	30.92	100.00
Total	67.04 (13,894)	53.37	46.63	100.00	64.41	35.59	100.00	44.66	55.34	100.00

*Vocational Teacher Training
Date of the Survey : September 1, 1972
Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.3

RESULTS FROM THE FOLLOW-UP STUDY OF THE M.S.S VOCATIONAL GRADUATES GRADUATED IN 1972 CLASSIFIED BY TRACK OF STUDY, EMPLOYMENT STATUS BY SECTOR AND SALARY IN THE PRIVATE SECTOR

Track of Study	Number of Graduates	Number of Observations	Participating in Job Markets					Students	Average Salary in Private Sector (in baht)
			Total	Employment			Unemployment		
				Total	Pulbic Sector	Private Sector			
Manufacturing & Industry	438	408	257	108	42	66	149	151	860.29
Home Economics	127	117	20	8	-	8	12	97	600.00
Total	565	525	277	116	42	74	161	248	832.15

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.4

PERCENTAGE DISTRIBUTIONS OF THE M.S.3 VOCATIONAL GRADUATES GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT CLASSIFIED BY TRACK OF STUDY

Track of Study	Percentage of Sample Size	Participating in Job Markets	Not Participating in Job Markets (Student)	Total	Employment	Unemployment	Total	Public Sector	Private Sector	Total
Manufacturing & Industry	93.15 (408)	62.99	37.01	100.00	42.02	57.98	100.00	38.89	61.11	100.00
Home Economics	92.13 (117)	17.09	82.91	100.00	40.00	60.00	100.00	0.00	100.00	100.00
Total	93.10 (525)	52.76	47.24	100.00	41.88	58.12	100.00	36.21	63.79	100.00

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.5

RESULTS FROM THE FOLLOW-UP STUDY OF THE M.S.6 VOCATIONAL GRADUATES GRADUATED IN 1972 CLASSIFIED BY TRACK OF STUDY, EMPLOYMENT STATUS BY SECTOR AND SALARY IN THE PRIVATE SECTOR

Track of Study	Number of Graduates	Number of Observations	Participating in Job Markets					Students	Average Salary in Private Sector (in baht)
			Total	Employment			Unemployment		
				Total	Public Sector	Private Sector			
Agriculture	1,943	1,665	770	270	198	72	500	895	956.18
Commerce	3,835	2,013	1,101	751	92	659	350	912	939.99
Manufacturing and Industry	6,882	4,865	2,436	1,486	681	805	950	2,429	916.80
Home Economics	1,925	1,699	509	252	111	141	257	1,190	649.50
Arts	359	331	5	5	-	5	-	326	950.00
Total	14,944	10,573	4,821	2,764	1,082	1,682	2,057	5,752	905.26

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.6

PERCENTAGE DISTRIBUTIONS OF THE M.S.6 VOCATIONAL GRADUATES GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT CLASSIFIED BY TRACK OF STUDY

Track of Study	Percentage of Sample Size	Participating in Job Markets	Not Participating in Job Markets (Student)	Total	Employment	Unemployment	Total	Public Sector	Private Sector	Total
Agriculture	85.69 (1,665)	46.25	53.75	100.00	35.06	64.94	100.00	73.33	26.67	100.00
Commerce	52.49 (2,013)	54.69	45.31	100.00	68.21	31.79	100.00	12.25	87.75	100.00
Manufacturing & Industry	70.69 (4,865)	50.07	49.93	100.00	61.00	39.00	100.00	45.83	54.17	100.00
Home Economics	88.26 (1,699)	29.96	70.04	100.00	49.51	50.49	100.00	44.05	55.95	100.00
Arts	92.20 (331)	1.51	98.49	100.00	100.00	0.00	100.00	0.00	100.00	100.00
Total	70.75 (10,573)	45.60	54.40	100.00	57,33	42.67	100.00	39.15	60.85	100.00

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.7

RESULTS FROM THE FOLLOW-UP STUDY OF THE DTE GRADUATES GRADUATED IN 1972 CLASSIFIED BY TRACK OF STUDY, EMPLOYMENT STATUS BY SECTOR AND SALARY IN THE PRIVATE SECTOR

Track of Study	Number of Graduates	Number of Observations	Participating in Job Markets					Students	Average Salary in Private Sector (in baht)
			Total	Employment			Unemployment		
				Total	Public Sector	Private Sector			
Agriculture	148	82	56	44	28	16	12	26	1,500.00
Commerce	46	7	7	6	4	2	1	-	1,175.00
Manufacturing and Industry	496	374	349	291	200	91	58	25	1,368.13
Home Economics	62	3	3	3	3	-	-	-	-
Arts	90	71	57	57	42	15	-	14	1,100.00
Total	842	537	472	401	277	124	71	65	1,349.60

Date of the Survey : September 1, 1971

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.8

PERCENTAGE DISTRIBUTIONS OF THE DTE GRADUATES GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT CLASSIFIED BY TRACK OF STUDY

Track of Study	Percentage of Sample Size	Participating in Job Markets	Not Participating in Job Markets (Student)	Total	Employment	Unemployment	Total	Public Sector	Private Sector	Total
Agriculture	72.59 (249)	90.36	9.64	100.00	70.76	29.33	100.00	81.13	18.87	100.00
Commerce	49.03 (579)	81.69	18.31	100.00	64.48	35.52	100.00	17.70	82.30	100.00
Manufacturing & Industry	51.04 (1,083)	88.00	12.00	100.00	88.98	11.02	100.00	54.60	45.40	100.00
Home Economics	40.00 (178)	26.40	73.60	100.00	76.60	23.40	100.00	55.56	44.44	100.00
Arts	59.86 (170)	86.47	13.53	100.00	100.00	0.00	100.00	44.90	55.10	100.00
Total	51.63 (2,259)	81.67	18.33	100.00	81.03	18.03	100.00	48.96	51.04	100.00

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.9

RESULTS FROM THE FOLLOW-UP STUDY OF THE VTT GRADUATES GRADUATED IN 1972 CLASSIFIED BY TRACK OF STUDY EMPLOYMENT STATUS BY SECTOR AND SALARY IN THE PRIVATE SECTOR

Track of Study	Number of Graduates	Number of Observations	Participating in Job Markets					Students	Average Salary in Private Sector (in baht)
			Total	Employment			Unemployment		
				Total	Public Sector	Private Sector			
Agriculture	148	82	56		28	16	12	26	1,500.00
Commerce	46	7	7		4	2	1	-	1,175.00
Manufacturing and Industry	496	374	349		200	91	58	25	1,368.13
Home Economics	62	3	3		3	-	-	-	-
Arts	90	71	57		42	15	14	14	1,100.00
Total	842	537	472		277	124	65	65	1,349.60

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.10

PERCENTAGE DISTRIBUTIONS OF THE VTT GRADUATES GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT CLASSIFIED BY TRACK OF STUDY

Track of Study	Percentage of Sample Size	Participating in Job Markets	Not Participating in Job markets (Students)	Total	Employment	Unemployment	Total	Sector	Private Sector	Total
Agriculture	55.41 (82)	68.29	31.71	100.00	78.57	21.43	100.00	63.64	36.36	100.00
Commerce	15.22 (7)	100.00	0.00	100.00	85.71	14.29	100.00	66.67	33.33	100.00
Manufacturing and Industry	75.40 (374)	93.32	6.68	100.00	83.38	16.62	100.00	68.73	31.27	100.00
Home Economics	4.84 (3)	100.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	100.00
Arts	78.89 (71)	80.28	19.72	100.00	100.00	0.00	100.00	73.68	26.32	100.00
Total	63.78 (537)	87.90	12.10	100.00	84.96	15.04	100.00	69.08	30.92	100.00

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.11

RESULTS FROM THE FOLLOW-UP STUDY OF VOCATIONAL AND TECHNICAL GRADUATES IN AGRICULTURE GRADUATED IN 1972 CLASSIFIED BY LEVEL OF EDUCATION, EMPLOYMENT STATUS BY SECTOR AND SALARY IN PRIVATE SECTOR IN TERMS OF PROGRAMME DISTRIBUTION

Level of Education	Number of Graduates			Number of Observations			Participating in Job Markets														
							Total			Employment									Unemployment		
										Total			Public Sector			Private Sector					
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(b)	(a)	(b)	(c)	(a)	(b)	(c)
M.S.6	6,882	2,153	4,729	4,865	1,736	3,129	2,436	834	1,602	1,486	406	1,080	681	130	551	805	276	529	950	128	522
DTE	2,122	106	2,016	1,083	89	994	953	86	867	848	76	772	463	69	394	385	7	378	105	10	95
VTT	496	142	354	344	142	232	349	137	212	291	127	164	200	62	138	91 91	65	26	58	10	48
Total	9,500	2,401	7,099	6,322	1,967	4,355	3,738	1,057	2,711	2,625	609	2,016	1,344	216	1,083	1,281	348	933	1,113	448	665

a = Total

b = Under Loan Programme

c = Regular Programs

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.12

COMPARISON OF THE PERCENTAGE DISTRIBUTIONS OF VOCATIONAL AND TECHNICAL GRADUATES IN AGRICULTURE GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT BETWEEN DIFFERENT PROGRAMMES OF EDUCATION

Level of Education	Percentage of Sample Size		Participating in Job Markets		Unemployment		Private Sector	
	Loan Programme	Regular Programme	Loan Programme	Regular Programme	Loan Programme	Regular Programme	Loan Programme	Regular Programme
M.S.6	78.08 (791)	95.72 (874)	37.17	54.46	65.65	64.50	30.69	24.26
DTE	70.16 (221)	100.00 (28)	89.14	100.00	31.98	10.71	5.58	67.86
VTT	55.41 (82)	-	68.29	-	21.43	-	36.37	-
Total	73.28 (1,094)	95.86 (902)	50.00	55.88	48.99	61.51	20.79	30.93

Date of the Survey : September 1., 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.13

RESULTS FROM THE FOLLOW-UP STUDY OF VOCATIONAL AND TECHNICAL GRADUATES IN AGRICULTURE GRADUATED IN 1972 CLASSIFIED BY LEVEL OF EDUCATION, EMPLOYMENT STATUS BY SECTOR AND SALARY IN PRIVATE SECTOR IN TERMS OF PROGRAMME DISTRIBUTION

Level of Education	Number of Graduates			Number of Observatopm			Participating in Job Markets															Student			Salary in Private Sector (in baht)		
							Total			Total			Employment						Unemployment								
													Public Sector			Private Sector										
	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
M.S.6	1,943	1,030	913	1,665	791	874	770	244	476	270	101	169	198	70	128	72	31	41	500	193	307	895	497	398	956.18	1,050.81	884.63
DTE	343	315	28	249	221	28	225	197	28	159	134	25	129	123	6	30	11	19	66	63	3	24	24	-	1,198.33	1,195.45	1,200.00
VTT	148	148	-	82	82	-	56	56	-	44	44	-	28	28	-	16	16	-	12	12	-	26	26	-	1,500.00	1,500.00	-
Total	2,434	1,490	914	1,996	1,094	902	1,051	547	504	473	279	194	355	221	134	118	58	60	578	268	310	945	547	398	1,027.40 *1,091.48	1,088.03 1,202.15	984.50

* Average salary of VTT graduates is included

a = Total
b = Under Loan Programme
c = Regular Programme

Date of the Survey : September 1, 1972
Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.13 (Continued)

Level of Education	Student			Salary in Private Sector (in baht)		
	(a)	(b)	(c)	(a)	(b)	(c)
M.S.6	2,429	902	1,527	916.80	951.51	898.69
DTE	130	3	127	1,411.14	1,300.00	1,413.20
VTT	25	5	20	1,368.13	1,500.00	1,038.46
Total	2,584	910	1,674	1,097.43	1,060.96	1,111.40

a = Total

b = Under Loan Programme

c = Regular Programe

Date of the Surbey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

TABLE 8.14

COMPARISON OF THE PERCENTAGE DISTRIBUTIONS OF VOCATIONAL AND TECHNICAL GRADUATES IN MANUFACTURING AND INDUSTRY GRADUATED IN 1972 DISTRIBUTED BY JOB PARTICIPATION, EMPLOYMENT STATUS, AND SECTOR OF EMPLOYMENT BETWEEN DIFFERENT PROGRAMMES OF EDUCATION

Level of Education	Percentage of Sample Size		Participating in Job Markets		Unemployment		Private Sector	
	Loan Programme	Regular Programme	Loan Programme	Regular Programme	Loan Programme	Regular Programme	Loan Programme	Regular Programme
M.S.6	80.63 (1,736)	66.17 (3,129)	48.04	51.20	51.32	32.58	67.98	48.98
DTE	83.96 (89)	49.31 (994)	96.63	87.22	11.63	10.96	9.21	48.96
VTT	100.00 (142)	65.54 (232)	96.48	91.38	7.30	22.64	51.18	15.85
Total	81.92 (1,967)	61.35 (4,355)	53.74	62.25	42.38	24.53	57.14	46.28

Date of the Survey : September 1, 1972

Source : Department of Vocational Education, The 1973 Annual Report

FINDINGS FROM THE 1975 SURVEY (S.75)

Results from the S.75 will be presented in five separate sections. The first will deal with opinions and comments of M.S.3 and DTE students regarding their future plans on education and work and some of their comments on curriculum. Information investigated in this section is obtained from Tables 9 to 12. The second section will demonstrate general opinions of graduates concerning their previous education, methods for securing jobs, graduates who are employed in the private sector and their opinions on factors that help them secure their first jobs. It will also show the relevance of vocational training from the point of view of employees and their assigned works. This set of information is available in Tables 13 to 15.

Empirical evidence on the average waiting period for the first jobs of graduates, average rate of turn-over and average months of unemployment per each year of employment, and number of applicants per each vacant position, will be discussed in the third section. Information used in this section will be drawn from Tables 16 to 20. Methods in recruiting employees and criteria for recruitment of employees together with their opinions toward work performance of vocational and technical graduates drawn from information available in Table 21 will be discussed in the fourth section. The last section will discuss the firm structure observed from different aspects of combination of employees. Information used in this section is drawn from Table 22.

Future Plans on Education and Work, and Comments on Curriculum

The results shown in Table 9.1 indicate that none of the M.S.3 students from comprehensive schools plan to work right after their graduation, about 85 per cent of them report that they intend to continue studying full-time and about 15 per cent say that they will continue study part time. The said proportions are the same for both male and

female students. Among those who plan to study full time 47 percent reports to pursue in the academic stream. However, higher proportions of female students (49.02 per cent) report to pursue vocational stream while only 40.82 per cent of male students indicate their intention to do so. Nevertheless, those 12.24 per cent of male students who report to pursue other curriculums of training can be classified into vocational training as well, since training classified under this category is of nature in-service training carried out by schools operates under various government agencies for recruiting new government officials. These training institutions include military institutions, schools of nurses, a school for railway mechanics and engineers,a school of post-men, a school of custom officers, and teacher training institutions. However among those who report that they will study part-time, higher percentages of male students report that they will pursue vocational training.

For the M.S.6 graduates, about 6 per cent report that they will work only after their graduation about 24 per cent report that they will study part-time and 70 per cent will study full time(See Table 10.2-B). It should be observed at this point that more of the M.S.6 students are willing to enter job markets than the M.S.3 students. More of them want to study part-time and the proportion of those who want to continue study full time has been decreased considerably. At this point, there seems to be different patterns in the distributions of the-two sexes of M.S.6 students, namely, higher percentage of female students indicate their preference to continue their education full time. This outcome indicates that female students are less ready to be in job markets than male students although the difference in the degree between the two groups is only marginal.

Since these M.S.6 students were in vocational streams, only about 4 per cent of those who want to continue studying part-time and full time decided to switch to an adademic stream. It is also interesting to discover that about one third of these students indicate their

desire to continue their education overseas. The percentage is as high as about 48 per cent for male students while it is about 23 per cent for female students. The difference between the two indicate that there exists physical and cultural factors that operate against female students in case they want to continue their education overseas.

As the data are classified by track of study, it is found in addition that the highest percentage of commerce students are more ready to be in job markets; 13.33% report that they plan to work only and 33.33% of them report to study part-time and only 53.34 per cent report to continue study full time (See Table 10.4-B). The last percentage is much lower than the overall average of about 70 per cent. Next to commerce students are students in manufacturing and industry whereas about 70 percent of them report to continue study full-time. The highest percentages in this categories are found among students in agriculture, arts and home economics, 100.00, 100.00 and 87.50 per cent respectively. The findings in this part are quite consistent with the findings in the F.S.71-2, namely, M.S.6 students in commerce have greater employment opportunity than those in manufacturing and industries, agriculture and home economics respectively. However for art students the highest percentage of those who wish to continue thier study is the exceptional case since they do not have any problem in their unemployment. This high percentage of the continuation of their education of art students is resulting more from their professional requirement than any other factors.

Data in Table 10.4-B also provide us additional information on the fact that percentage of those who want to continue their education in academic stream is found among students in commerce since their subjects are quite close to the programmes available in various universities. It is also found in addition that with the exception of those in agriculture where the sample size for this group of students is so small, the highest percentage of those who wish to continue their study overseas is that of students in commerce (33 per cent), followed by those in

manufacturing and industry, arts and home economics respectively. The low percentage in this category for students in home economics results from the fact that the majority of students in this track is female and they also suffer from the handicaps that their curriculum is neither recognized nor commonly available overseas.

For the DTE students (See Table 11.2-B), it is found that about 97 per cent of them had their previous education in the vocational stream. Therefore it seems to indicate that the DTE programme has been well designed to serve the purpose for the continuation of education for M.S.6 graduates in this vocational stream. However, the data seem to indicate a change in studying trends for this group of graduates, namely, almost 85 per cent of them report that they want to continue studying. This figure is quite high in comparison to the findings in the F.S.71-2 where the results indicated that DTE was the level for termination of their education for a majority of students. This result probably reflects the increasing trend of unemployment among higher levels of graduates. As a result they are forced to stay in schools for higher levels of education.

The S.75 seems to indicate a new point of departing from schools for job markets at the M.S.6 levels, for graduates in commerce and manufacturing and industries. The former ones observed in the P.C.70 is M.S.3 and DTE.After this point of M.S.6 is passed another point of departure seems to be at a degree level. The new trend of the DTE students in delaying the termination of their formal training, encompassing the tighter job markets for this group of students,can be explained by the fact that after October 14, 1973, (the date of the historical event of student uprising in Thailand) many technical institutions and colleges were promoted to degree granting institutions. Because of these two factors there seems to be a general shift in the points of departure from school for work since 1970 from those of M.S.3 and DTE levels, to the two new points of the M.S.6 and the degree levels in 1975. This new trend probably started in 1974.

Figures in Table 11.1-B also indicate a consistent result that higher percentages of female students tend to indicate their preference in continuing their education than that of the male students. Almost 90 percent of them report that they want to continue their study at higher level. This outcome seems to confirm a repeated finding that female students are less ready to participate in job markets than their male counterparts at the same level of education. One of the reasons could be that the job markets may not be quite favourable for them as those for male graduates. This conjecture will be discussed again in the third section where empirical results relating to employment structure of male and female graduates are presented.

As those M.S.3 students in comprehensive programme who report that they will study part-time are asked to outline their reasons for doing so, the reasons seem to be more of a financial problem (see, Table 9.2). However, female students seem to attach less weight to the financial problem than the fact that they feel that they could gain more practical experience and money from work than if they continue their study full-time. For those who indicate their preference to continue their education in academic stream, reasons supplied by male and female students seem to be different in their emphasis. Male students seem to be well aware of the fact that academic education will provide higher opportunity to continue education at higher levels, while female graduates tend to give more weight to the answer that they just prefer to take academic subjects.

For those who indicate their preference in selecting a vocational stream for their further study, the reasons given by them (male and female students) seem to follow the overall pattern. They attribute the highest weight to the fact that they prefer the subjects, and they also admit openly that subjects in the vocational stream are easier than those in the academic stream. They also reckon the fact that it is harder for graduates in academic streams to find jobs. When the M.S.6 vocational students who graduated from academic stream are asked why they did not

continue their education in academic streams, they responded that they had tried but could not go on. (See Table 10.3).

When these M.S.6 students who plan to study part-time only are asked by the same question of why they do not want to study full time, high weight is given to the reason fo financial problems. Only a few M.S.6 students indicate their preference to pursue higher education in academic streams; and when they are asked why they want to do so, their responses are that they want to get a degree plus the fact that they aslo reckon that university graduates are highly respected and have higher opportunity to make their progress. When those who plan to pursue vocational education at the higher level (technical education) are asked why they want to do so, the first reason given by both male and female students is that they prefer the vocational to academic subjects. However, weight attached to the second and third ranking orders seems to be different between male and female students. Male students are more aware of the fact that a degree in the field that they want to do would not provide them as good pay as vocational education while female students rather admit the limitation in their ability to pursue university education.

As the classification by track of study is made (see Table 10.5), only students in commerce and manufacturing and industry want to admit that they can easily find jobs with the trained qualification. However, they are inclined to attach more weight to their preference in the subjects. The similar pattern of answers is also the case for the DTE students (see Table 11.2).

When both M.S.6 and DTE students are asked to give their opinions on what should be the ideal kind of their future jobs, the answer is quite unique for both groups in that they prefer to have a kind of job where they can apply their training, skills and knowledge (see Tables 10.5 and 11.1 - A).

The last set of questions in this section are those related to the comments on their training curriculum. Majority of both M.S. 6 and DTE students respond that they believe that the present curriculum is definitely helpful for their future work. Consequently, not many of them offer suggestions for the improvement of their curriculum, (See Tables 10,5 and 11.2). This pattern of responses is more true for the DTE students than that of the M.S.6 students. However, about 15 per cent of both groups indicate their discontent to their trained curriculum. They both claim that the curriculum would not help to create practical skills in any particular field because the courses are too academic.

This pattern of response is completely different from that of those graduates who were already employed during the interviewed period, (see Tables, 12.1 and 12.2). Although 92 and 93 per cent of M.S.6 and DTE graduates respectively admit the usefulness of their vocational and technical training for their first jobs, more than 50 per cent of them offer their comments on what should be the useful improvement for their trained curriculum. This situation can simply be explained by the fact that students probably do not have clear ideas on what should be done in order to improve their trained programmes until after they are graduated and find out some deficiencies in their training from their inabilities to perform the assigned task.

The first two ranking order of the suggestions for the improvement in their training programmes of both M.S.6 and DTE graduates is quite consistent. They both complain about the fact that too many theoretical lessons and only little practice have been offered during the classes. They also complain about not enough work-shop examples having been given to them. These two complaints are also consistent with the suggested improvements in their trained programmes of both M.S.6 and DTE students (See Tables 10.5 and 11.2). They both also suggest the reduction in academic subjects and the increase in practical section. They also recommend that actual practical training should be emphasized by

cooperation from private firms. These two consistent suggestions by both M.S.6 and DTE students and graduates should be taken seriously by the concerned authorities.

For the third ranking order in the complaints of graduates on their training programmes, there seem to be a diversion in their complaints between that of the M.S.6 and DTE graduates. The M.S.6 graduates complain more of the fact that the curriculum has been so fragmented, why the DTE graduates do not seem to share this complaint. This fact seems to indicate that training at the M.S.6 level is not designed to be self terminating while it is so for the DTE level. This pattern of the designed curriculum should be more relevant to the situation in 1970 where the points of termination of education for jobs appeared at M.S.3 and DTE levels. But for the new trend found in 1975 as there have been a shift in the points of termination of education to M.S.6 and the degree level, this designed curriculum for the M.S.6 and DTE students would be no longer consistent to the new points of educational termination. Thus, there should be a systematic redesign of the new curriculum at both M.S.6 and DTE levels to fit the two new points of educational termination.

Opinions of Graduates on their Education and Jobs.

The M.S.3 graduates are asked whether they think that if they had higher levels of education, it would help them in their careers. Eighty two per cent of the responses are negative. This high percentage of negative responses is almost sufficient to explain why they are satisfied with this level of education (M.S.3). However as they are asked to give the reasons why they did not continue their education at higher levels. The majority of them explain that they had the financial problem. They also admit the limitation in their abilities to continue studying (see Table 13.1). This set of facts implies that, although the M.S.3 graduates perceived that higher levels of training would not be very useful for their careers, they seem to indicate at the same time

that they would pursue higher levels of training if they had not been obstructed by the said two constraints.

Nevertheless, they appear to be quite consistant in their answer because they also indicate in their reasons in the third rank that they thought it would be harder for them to get jobs if they continued studying at higher levels. They also believe that they would not gain as much ex-erience from their formal education. At this point there is a deviation in ranking order between male and female graduates. Female graduates seem to attribute more weight to the fact that they just simply did not like to study.

As the M.S.6 graduates are asked whether they had any desire to study academic subjects, before they finally decide to select a vocational stream, 66 per cent of them have a negative response (see, Table 13.3). However, the distribution by the track of study for this answer is quite interesting because it reflects different job-market situations at the time of their graduation plus the current progression within their trained professions. The responses of graduates in different tracks of study to this question are quite consistent with the findings in the F.S. 71-2, on the part of employment status of the corresponding group of graduates. For example, for the graduates in home economics whose job markets have never been favourable for them indicate the lowest percentage about 41 per cent)of negative response to this question, which means that about 59 per cent of them desire to study academic subjects. The next lowest percentages of negative response from graduates in agriculture, whose rate of unemployment at the M.S.6 level has been quite high as well. The highest percentage of negative response is found among the group of graduates in arts whose rate of unemployment in 1972 was zero; followed by those in manufacturing industry and commerce, respectively. Readers should be reminded at this point that these graduates were employed at the time of their interviews. However, their answers did reflect their almost perfect knowledge about their future job markets at the time of their graduation. However, they could only

react within the set of constraints and options facing them at that time. This fact is supported by the highest percentage of unclassified reasons given by them.

The similar pattern of responses is also found from the same question posed to DTE graduates (see Table 13.5). The result is strikingly consistent to the findings for graduates at the same level in the F.S. 71-2. This time, again the percentage of negative response from graduates in home economics is still the lowest with the lower percentage (30.77) in absolute number than the M.S.6 graduates in the same track of study. The next lowest negative response is found this time among the group of graduates in commerce as it has already found earlier in the F.S. 71-2 that job markets for this group of graduates in 1972 was not so favourable for them. The situation can also be explained by the fact that the university education in the field of commerce is quite close to the training provided in technical institutions. Therefore the alternative option in pursuing the academic stream of education is more realistic to the M.S.6 graduates in commerce if they have the ability to do so. The percentage for the group of graduates in agriculture for this level has been improved from that of the M.S.6 graduates in the same track. This fact also reflects the improvement in the job markets for this group of graduates as found in the F.S.71-2 as well. The highest percentages with higher degree of magnitude are correspondingly found among the DTE graduates in Arts and Manufacturing and Industry respectively.

The next question posed to them is whether they have been thinking of attending Remkamhaeng University (the only open university in Thailand where entrance examinations are not required so long as a person has a secondary school certificate or other equivalent qualification) or other higher academic institutions, (see Tables, 13.3 and 13.5), there is no clear systematic answer as the one discussed. In general, it is founded that those with DTE level of education have revealed higher percentage of their preference in pursuing higher level of education

to that of the M.S.6 graduates. However the reasons given by the two groups are in different ranking orders. The M.S.6 graduates attach higher weight to the fact that they want to be pormoted while the DTE graduates only fell that such levels of education should be quite useful.

There are additional interesting points observed from the two sets of figures that should be mentioned. For, the M.S.6 graduates in manufacturing and industry, their interst in having higher education from a dominantly social science institution like Ramkamhaeng University is not so great (only about 34% indicate their intention to), while the percentage is highest for the graduates in commerce(58%). At the DTE level the interest has been reversed. Graduates in agriculture, Arts and Manufacturing & industry show their strong interest in broadening their academic education in the field of social science; 73, 59 and 55 percent of graduates in the respective tracks have indicated their intention to have such academic education. The percentage is lowest for the DTE graduates in commerce (42). The reason is quite clear form the fact that graduates of this level of education is aiming at broadening their knowledge more than looking for higher promotion only. Because of this fact, the situation has been in the opposite direction to that of graduates in commerce as they always attach higher weight to the factor of better promotion in both cases since the type of training that they would gain from Ramkamhaeng University should be in line with their specializsation. As a result, we have observed the opposite direction in attributing weight to training at Ramkamhaeng University or higher educational institutions of graduates in Commerce (M.S.6 and DTE levels), from the rest of other groups of graduates.

Regarding the methods for securing the first jobs of graduates, (see Tables, 14.1, 14.2, and 14.3), graduates of different levels of education appear to attribute different weights on different methods. The M.S.3 graduates relied more heavily personal influence of the influential person, while the M.S.6 and DTE graduates found their first jobs through information from friends. This stiuation reflects more of the

keen competition in job markets for the M.S.3 graduates than those with hgiher levels of education. The second method in securing jobs reported by the three groups of graduates (M.S.3, M.S.6, and DTE) is through their lpersonal inquiries. However, the DTE graduates seem to attribute higher weight to this method than the other two groups of graduates. The third method in securing jobs for the M.S.3 graudates is through friends, while the third method for the latter two groups of graduates are through recommendations of influential persons.

In comparison with the high weight given to this method by the M.S.3 graduates (32.88 per cent), the weights attributed to this method by the M.S. 6 and DTE decrease drastically, 15.35 and 12.88 per cent respectively. Through schools and training institutions seem to be the fourth consistent method insecuring their first jobs, for the three groups of graduates. However, the M.S.6 graduates appear to benefit from this method than the rest of them . The M.S.6 and DTE graduates appear to benefit more from information about their jobs through the advertisement than the M.S.3 graduates. Employment office seems to be the most inferior channel in helping graduates to find their jobs. However among the three groups, the M.S.3 graduates seem to benefit more from this channel than the rest of them. In our own opinion which is formed from the general observation, employment offices are only useful in helping unskilled workers (those with primary education and lower) in securing their jobs. However as the competition on jobs markets at lower level of education becomes more keen, these employment offices would probably play an increasing role in helping graduates in lower levels of education finding thier jobs.

In general it can be concluded that, since the job markets are more competitive for gradautes at lower level of education than the higher ones, there is a tendency for graduates to use all other means in order to help improve their personal chances than their own qualification. On the other hand, because the competition in job markets for graduates in higher levels of education is less keen than those for

the lower ones, there is a tendency for graduates at higher levels of education to depend more on their personal qualification in their methods for securing their first jobs.

Among the M.S.3 graduates, it appears that female graduates are more keen in looking for their first jobs through their own inquiries than their male counter parts. There are also quite systematic patterns in methods for securing jobs of graduates in different tracks of study at both M.S.6 and DTE levels. Graduates in Commerce appear to rely more on influences of influential persons than any other groups of graduates, while graduates in manufacturing and industries appear to attribute more weight to the method of personal inquiries than the rest of them. Both graduates in commerce and manufacturing and industry seem to benefit more about information for their first jobs through their own training institution than other groups of graduates. The rest of them seem to depend more on the two conventional means, namely through firends and through personal inquiries.

As graduates are requested to attribute weights to different factors that help them securing their first jobs, again, there appears to be two systematic patterns between that of the M.S.3 graduates and graduates' at higher levels of education, (see Tables 14.1, 14.2, and 14.3). The M.S.3 graduates actually attribute the highest weight to knowledge or special knowledge, followed by work experience, recommendations from friends or influential persons, while good working record and guaranteed behaviour is listed as the fourth priority. For the M.S.6 and DTE graduates, work experience receives equal to or more emphasis than knowledge or special knowledge, while the rest of them follow the same ranking order. This fact indicates that the M.S.3 graduates probably are more concerned about the deficiency in their formal training than their counterparts, while the M.S.6 and DTE graduates probably more concern about the fact that they still have some deficiency resulting from their inadequate work experience.

It is also interesting to observe that there is little deviation in attributing weight to the third and fourth ranking factors between male and female graduates. While female graduates attribute higher weight to good working record or guaranteed behaviour than recommendation from friends or influential persons, male graduates attribute weight in the opposite order. This fact probably implies that female graduates are more keen than male graduates in trying to be successful in their jobs through their own abilities. The evidence found earlier that female graduates also try to find their jobs more through the method of personal inquiries than male graduates, can now be used to support the conclusion about attitude toward factors that help secure the jobs of graduates just mentioned above. On the other hand, male graduates are probably well aware of the keen competition in job markets and want to be realistic on this score.

At the M.S.6 level, graduates in all tracks of education attribute more weight to work experience than knowledge except those in agriculture and home economics. However, at the DTE level only graduates in arts and home economics do so. Tn general we can probably conclude that graduates in arts always attribute higher weight to work experience than knowledge, while graduates in agriculture consistently advocated for knowledge higher than work experience. At the same time graduates in commerce and manufacturing and industry seem to attribute equal weight to the two factors, while graduates in home economics seem to be inconsistent on this point.

The last point to be discussed in this section is opinions of the M.S.6 and DTE graduates relating to their training and the nature of their work . (See Tables, 15.1 and 15.2). The aim of this part of study is to find out whether vocational education is essential for the jobs assigned to the graduates. For this reason, only M.S.6 and DTE graduates were interviewed on this point. The first question on this part posed to a graduate is whether his employer will employ him if he has no vocational qualification. The main objective

in asking this question is to find out whether the task assigned to the graduate is relevant to his training. Thirty three per cent of the M.S.6 graduates supply on affirmative response while 31 percent of DTE graduates do so.

The small percentage of positive response indicate to a certain degree that vocational training is quite relevant to their employment, though the training is not directly relevant for one third of the cases. The smaller percentage of positive response of graduates at the DTE level indicate the increase in specialization in their training and the more relevance of their training to their jobs. The results found from each group of graduates at the same level of education are quite consistant with the related finding from Tables 14.2 and 14.3. M.S.6 graduates in arts have the highest percentage of affirmative response while that of graduates in agriculture is the lowest.

These outcomes support the fact that the work performed by graduates in arts require more work experience than knowledge in comparison with the one performed by graduates in agriculture. The percentages of responses in this category of graduates in commerce and manufacturing and industry are in the middle ranking, which indicate equal weight assigned to training and experience for these two groups of graduates as expected. The percentage distribution of the affirmative response to this question of whether the graduate will be employed if he did not have such vocational training, for the DTE graduates in each corresponding track of study indicates a systematically lower percentage for each corresponding group of graduates,which indicates quite a consistant result as mentioned.

When being asked whether the graduate can perform the assigned task if he has no formal vocational training, 50 per cent of the M.S.6 graduates supply an affirmative response under the condition that if they are trained on the jobs for specific periods of time. This outcome implies the fact that vocational education at the M.S.6 level can be easily replaced by on-the-job training programme. However, the latter programme is not a perfect substitution for vocational education training.

The percentage of this positive response is lower for the DTE graduates, which indicates a more specialization in the nature of training of the DTE than that of the M.S.6 programmes, the consistent result to what was explained earlier. The percentage distribution to this question for the corresponding groups of the DTE graduates in comparison with that of the M.S.6 graduates is systematically lower as expected with the exception of the DTE graduates in commerce where seemingly inconsistently is detected. Nevertheless, this appealed inconsistency can possibly be explained by the fact that there has been a recent increasing trend for higher rate of unemployment of the DTE graduates in commerce. As a result many of them are employed in positions that do not require much of their training skills. Therefore, there is a high tendency for them to report that the jobs performed by them can be done by anyone who has been trained on-the-job for certain periods of time.

The last question asked in this respect is to know whether academic training plus on-the-job training can be substituted for vocational training. Eighty per cent fo the M.S.6 graduates supply an affirmative response while, 70 per cent of the DTE graduates do so. The difference in the two figures, again, indicate the different levels of specialization in the training of the two groups of graduates. It is now quite evident that academic training plus on-the-job training are good substites for vocational training. It is yet a matter to be investigated, if such a programme is operated, on who should share what part of the costs and whether there is any net social gain from doing so.

However, there are different ranges in the degree of substitutability between the two programmes (academic plus on-the-job training and vocational training) when each track of study is taken into consideration. Graduates in arts tend to indicate that their track of study is quite a specialized one, therefore academic plus on-the-job training only cannot be easily substituted for their training programme plus work experience. The similar is true to a lesser degree for training in agriculture. However, the emphasis is more on the nature of specific

knowledge gained from the study in this track more than work experience. The similar case is also true of the DTE graduates in manufacturing and industry where specialization of the training nature within their track of study plus work-shop experience provided in their training programme pose some difficulty for the programme to be substituted by the combination of academic training plus on-the-job training.

Some Quantitative Measurements Relating to the Nature of Employment of Graduates.

Four different quantitative measurements will be discussed in this section. They are the average waiting period for the first jobs of graduates, the average rate of turnover, the average length of time lost in unemployment per each year of employment and the number of applications per one vacant position.

Tables 16.4, 16.17 and 16.18 contain information relating the average waiting period for the first job of graduates classified by the period of their graduation, level of education, sex and track of study. Because the average figures of the M.S.3 graduates and those of the M.S.6 graduates, to a lesser extent, have been strongly affected by the unusual observations of those who had not participated in job markets for long periods of time after their graduation (the maximum number of waiting period for the M.S.3 male graduates is 16 years while that of female graduates is 13 years and 4 months, and that of the M.S.6 graduates in commerce is 19 years), two average figures are calculated, the within-one-year average and the overall average. Since the figures overall average will be directly affected by these unusual samples, it is assumed in addition that the waiting period for the first job longer than the period of three years is considered to be an unusually long period. The average figure of two years is assigned to all the cases when waiting period is longer than one year.

With this set of assumptions, it is found in Table 16.17 that the average waiting period for the first job of the M.S.3, M.S.6 and DTE

graduates within the period of one year are, 4.6, 3.5 and 2.5 months, respectively, while the overall average for them are, 12,9, 8.8 and 6.2 months respectively. The figures speak quite clearly for themselves that the average waiting period for the first job is shorter for graduates of higher educational levels. It is now quite clear why competition for jobs is more keen at the lower levels of education.

Between male and female M.S.3 graduates, it is found in Table 16.4 that the average period of waiting within one year is lower for female graduates than that of the male graduates (3.9 and 4.9 months, respectively). However, the overall average for female graduates is higher than their male counterparts (13.7 and 13.9 months, respectively). These two results probably reflect the fact that, there had been more female graduates proportionally who do not actively look for jobs for quite sometime after their graduations than that of the male graduates. Consequently, their overall average waiting period turns out to be higher than that of male graduates. However, for those who were unemployed within a period of one year, were those who actively looking for jobs. Between male and female graduates, we have already indicated that female graduates were more keen in making inquiries for jobs directly. Therefore, the results turn out to be as we have found that the average waiting period for the first job for the female graduates is lower than that of their male counterparts. As classification by the period of graduation is made, using a range of 10 years for a period, in order to find out whether there is any change in the length of average waiting period over the passed 50 years, the results indicate the weak trends of increasing length of the average waiting period for M.S.3 and M.S.6 graduates and a strong trend in the same direction for the DTE graduates, (see Table 16.17).

There is, a problem when comparison is made for the M.S.3 and M.S.6 graduates between other periods of graduation and that of 1966-1975. The rest of the two sets of figures especially those of the overall averages as already mentioned, have been affected by the unusual observations of those who had not actively participated in the job market. As a result,

even with the set of assumptions mentioned earlier, the overall average rates of waiting period for these two groups of graduates are quite high. However, the data during 1966-1975 has been only slightly affected by such unusual observations simply because only few of them would have a chance to fall into this sample group.

Moreover, there is a good possibility in incooperating systematic bias in our sampling method for the group of recent graduates. The majority of samples from this group can be easily accessible forthe interviews once they were selected as samples because they were not in highly responsible positions. For obvious reasons, the 1975 graduates who were interviewed were those who were able to find jobs in few month time after their graduation, otherwise they would not be part of our samples. Therefore,even the average figures of those who are employed within-one-year can be under estimated because of this systematic bias in the method of selection of graduates for the interviews. Hence the average figures of M.S.3 and M.S. 6 graduates during 1966-1975 period must be analysed with care.

Taking all these factors into account we can conclude in general that there appears to be trends for increasing length of waiting period for all groups of graduates, and this trend for the DTE graduates is quite evident. It should be observed also that there is a cyclical fluctuation within this general trend. The obvious example is during the period of 1946-1955 when the W.W.II had just been over in Thailand in 1945. The average waiting period of graduates during that period for all groups of graduates tend to be quite high. However, the figures in Table 16.17 seem to indicate inconsistent patterns for those of M.S.6 and DTE graduates for the figures within-one-year and overall averages. This pattern of inconsistency probably results from the fact that the span of the period (10 years) is too long since in the early 1950's Thailand also experienced the economic boom resulting from the Korean War as well.

Tables 16.18 show the average waiting period for the first jobs of M.S.6 and DTE graduates classified by their tracks of study.

Again, the pattern is quite clear that the lowest average waiting period is found among graduates in commerce, manufacturing and industry and arts and the highest average of waiting period is found among those in agriculture and home economics. The average waiting period for the DTE graduates is consistently lower than that of the M.S.6 gradutes in the same track of study for both the figures of one year and overall averages.

It should be pointed out again here that, the finding for the DTE graduates in commerce from the S.75 is inconsistant with that found in the F.S.71-2. The reason is as has been explained before, namely, there might be a structural change in employment structure for this group of graduates. Since the data calculated here are stocks while the ones in the F.S.71-2 are flows.

The next quantitative measurement that we shall observe is the average rates of turn-over of graduates classified by level of education, sex, firm size of first employment and track of study. The hypothesis that we have made in this regard is that the higher the average rate of turn-over the better the job markets for the relevant groups of graduates.

First of all we want to find out whether there is any correlation between the average waiting period for the first job and the average rate of turn-over. We suspect that the average rate of turn-over is negatively correlated with the average waiting period. The result is shown in Table 17.4, and the hypothesis is confirmed for all the three groups of graduates (M.S.3, M.S.6 and DTE)with some slight inconsistency between the average waiting period of 3-6 months and over 6 months for the M.S.6 graduates. As the average rates of turn-over are classified by years of work experience (see Table 18.3), another interesting pattern of the change in the average rate of turn-over has emerged. For those who have been working for the period less than 15 years, there is a clear pattern that the average rate of turn-over is higher for graduates of higher levels of education than that of the lower one.

However for those who have been working longer than 15 years, the pattern has been reversed. The average rate of turn over is lower for the groups of graduates with higher levels of education and higher for those with lower levels of education.

This situation probably implicates the fact that, in general job markets for graduates with higher levels of education must be better than those of the lower ones. As a result, the higher rate of turn over is found among those with higher levels of education. However, after having worked for 15 years, graduates with higher levels of educational training seem to be quite settled with quite respectable positions such as executives, chief or assistant supervisors, the tendency for these persons to look for new jobs would have been reduced. At the same time those with lower levels of education either because of their increasing experience to be more ready for top positions or because of their old age that are no longer desired by their employers for the pay that they receive, the average rate of turn-over for this group of graduates must consequently, be higher than that of the graduate with higher levels of education

As the samples are classified by sex, it is found as expected that the average rate of turn-over for female employees is much lower than that of the male. The rates have been consistently lower for female graduates than those of the male graduates for all classifications of years of work experience (also see Table 18.1). The last category of classification in this part is by the firm size of the first employment (also see Table 18.1). The result turns out to be quite consistent as well since those who had originally been employed in the large firm would have a better chance of changing their jobs for better ones. The rationale behind this fact is that those who had been employed by the large firm at the beginning would be better equipped with understanding and experience in working with modern and more systematic methods in firms' administration. There is a tendency for these persons to be trained to be specialized in certain areas of

responsibility. These are the qualities of employee required by growing firms of small and medium size . Therefore, it should be easier for those who were previously employed in large firms to find better paid jobs in growing firms of small and medium sizes. The same set of rationalizations cannot be applicable for those who started from small or medium size firms.

As samples are classified by track of study, (see Tables, 17.7, 18.2 and 18.3) it is found that the highest average rates of turnover is found among M.S.6 graduates in arts and manufacturing industry respectively)1.3 and 1.0). The rate of turnover of graduates in home economics is the lowest (0.7) as expected. However, it should be noted also that the sex effect (female) on graduates in this track of study is probably higher than the track-of-study effect. For the DTE graduates, the rates are highest among graduates in commerce and manufacturing industry respectively (1.2 and 1.1). Again, the lowest rate of turn-over is found among graduates in home economics (0.4). However, the low rate of turn-over of graduates in arts at this level of education cannot be comparable to the rest of them because the sample size of the DTE graduates in this track is so small, and no observations are available for this group of graduates for those who have been working for a period longer than 15 years. (See Table 18.3).

Table 19.1 shows the average months of unemployment per year of employment of graduates classified by sex for the M.S.3 graduates and level of education, all classified by number of job turn-over. It is found in general that the average months of unemployment per each year of employment of the M.S.3 graduates is higher than that of the M.S.6 and DTE graduates respectively, (2.2,1.4 and 1.1, months per year respectively). Among the M.S.3 graduates the average is much higher for female than that of the male (3.4 and 1.7 months respectively).

As the data are classified by number of job turn-over, interesting patterns of the distribution of the average months of unemployment per

each year of employment for each group of graduates emerges. The distribution of that of the DTE graduates is of a parabola shape with the point of minimum at the third turn-over. The distribution of average months of unemployment of the M.S.6 graduate is also of a parabola shape with the point of minimum drifts from the fourth to the sixth times of number of turn-over. On the other hand the distribution of average months of unemployment of the M.S.3 graduates is of a rectangular hyperbola shape with the gradual diminishing in average months of unemployment all the way through (See the Figure 2 on the next page).

The difference in shape of the three distributions can be explained by the fact relating the nature of average rate of turn-over by different groups of graduates shown earlier in Table 18.1.

Because of the fact that after a few times of changing for new jobs, the DTE gradautes have probably been promoted to top positions available for them. If they keep looking for new positions it would be harder for them to find one therefore they must wait for longer periods of time while the number of years to be in such position became shorter. As a result, we have already found in Table 18.1 that although the rate of turn over of the DTE graduates is still higher in absolute terms than their previous rate after they have been working for 15 years, the relative rates of turn over in comparison with those of the M.S.6 and M.S.3 graduates are much lower.

For the M.S.6 graduates, they had not reached the top positions available for them until after the fourth to the sixth times of turn-over. As the result the point of minimum of this group of graduates has been drifted to the range of the fourth to the sixth times in the process of their changing jobs. The longer range for the points of minimum for this group of M.S.6 graduates indicates the fact that the top positions for them could come at the fourth to the sixth times in their changing for new jobs.

For the M.S.3 graduates they would probably never experience reaching the top positions available for them. Therefore they keep on changing for new jobs and at each time of the change they actually experience the decrease in the average months of unemployment along the process.

It should be noted also that the figures of average months of employment of the M.S.3 and M.S.6 graduates do not change as smoothly as that of the DTE graduates. This pattern of stochastic distributions of the figures for the two groups of graduates is caused by unusual observations of those who had not participated in job markets until the later part of their ages. These unusual observations appear in the group of samples in the first few classes of number of job turn-over.

Table 19.2 shows the average numbers of months of unemployment per each year of employment classified by track of study. The results turn out to be as expected, namely, the average months of unemployment are shortest for both M.S.6 and DTE graduates in arts (0.7 and 0.7 month) while the periods are longest for graduates in home economics at respective levels of education (2.7 and 2.1 months respectively). The period is unusually high for the M.S.6 graduates in commerce in comparison with that of the ones in agriculture. This relatively high figure for the M.S.6 graduates in commerce has been affected by unusual observations explained above. Table 20.2 provides additional information on what is the likely proportion of applicants per one vacant position. Data were tabulated from Form (F) where employers are the ones who supplied this information. No classification by the levels of education is made, and only three groups of graduates, namely those in agriculture, commerce and manufacturing and industry were reported by employers.

It is found in general that the proportion of applicants to the vacant position is the lowest for graduates in agriculture, (1 : 3) and the highest for graduates in commerce (1 : 7). Graduates in agriculture and manufacturing and industry prefer more to launch their

application with small firms, while those in commerce prefer to launch theirs with medium and large firms. The high number of applicants per a vacant position is found among a medium size firm (1 : 7), followed by that of a small firm (1:6) and a large firm (1:4), respectively.

It should be noted that although there is an obvious advantage from being first employed in the large firm as already discussed, only small proportions of applicants want to approach them. Because graduates in commerce seem to prefer to start their careers in large firms, they appear to enjoy the advantage gained from the relatively high rate of turn-over in the later part of their careers. It should be mentioned at this point also that, since the information presented in Table 20.2 is a flow in 1975, the figures seems to indicate a change in employment structure of graduates in commerce and manufacturing and industry in that job markets do not seem to be as favourable for the two groups of graduates as found in the F.S.71-2. However, the high number of applications per a vacant position at this point should not be taken as a decisive factor indicating the relatively un-favourable trends in job markets of the two groups of graduates (commerce and manufacturing and industry), because this high proportion of applications may result from the fact that the average rates of turn-over among the two groups of graduates are quite high plus the fact that these graduates may, by the average, launch more applications per each person than other groups of graduates.

Employer's Opinions.

Employers were requested to explain how employees were recruited. The results are shown in Table 21.2. Firms are classified into three categories, by nature of firm ownership, industry and firm size. There appears to be significantly different patterns in recruitment of employees between domestic firms and foreign (shared ownership) firms. While high proportions of employees recruited by domestic firms is through personal recommendations (44.67 per cent), the significant proportion of recruitments for foreign firms (30.30 per cent) are done through

advertisement. This latter method of recruitment is only given in the second priority list for domestic firms (24.45 per cent). While the method through personal recommendation also only receive second priority for foreign firms (28.79 per cent). The method of recruitment through educational institutions is listed in the third priority for both firm groups. However more emphasis is given to this method by foreign firms. Other significant methods of recruitment for domestic firms is through personal inquiries (9.43 per cent) while none are recruited that way by foreigh firms. At the same time foregin firms attribute higher weight to employment office than domestic firms do. One curious method reported by foreign firms is through transference of ownership (7.59 per cent). This fact indicates in addition that the process that many foreign firms started or enlarged their businesses in Thailand through buying up domestic firms. Another method of recruitment of firms in both groups is through the supplies by head offices.

The two contrasting patterns in the methods of recruitment of employees of the two firm groups, lead us to conclude in general that, foreign firms try to recruit employees through formal channels as much as possible while domestic firms prefer to rely more on informal channels (through personal recommendation and personal inquiries). These two distinctive patterns of recruitment of the two firm groups probably result from different characters of firms in both groups, which in turn, determine the type of employees employed by these firms. Table 21.2, in the column of the method of recruitment "through transference of ownership", additional information indicates that all foreign firms are in secondary industries and none of them are small-size firms. The fact that they are either medium size or large size firms in the secondary industry must have significant implication on the type of training of employees that these firms want to employ.

We have seen earlier that the M.S.3 graduates indicate their first method in securing jobs through recommendations of influential persons. While graduates of higher level attribute relatively less

weight on this method. These findings seem to coincide with the results just discovered here, namely, domestic firms tend to give highest weight to the method of recruitment through personal recommendation while foreign firms only assign second ranking order to this method. With the additional set of information that foreign firms are only those in secondary industry and none of them are small firms, a rough pattern of the type of firms in relation with type of training of employees seems to emerge at this point. That is small firms tend to employ more graduates of lower levels of education by using informal means as points of contact while medium and large firms tend to employ more graduates of higher levels of education by using more of formal means as points of contact.

As firms are classified by industry, the information on this part for firms in primary industry does not seem to be reliable because of small sample size (only 9 samples, see Table 21.1). A comparison in this part will only be made between those in secondary and tertiary industries. In general there are no substantial differences in patterns of the distributions of method in recruiting employees of firms in the two industries. However, the difference between the two seems to be originated more from the fact that secondary industry contains more of medium and large size firms than tertiary industry. We have already pointed out that all foreign firms which contained no small firms are grouped in this secondary industry.

One prominent characteristic in the method of recruiting employees of medium size firms, as will be discussed below, is that the significance on the method of recruitment through personal recommendation is less emphasized than that of small firms while the method through personal inquiries although not of great significance receive more weight than that of small firms (see Table 21.2). This pattern is similar to the one found from the comparison made between firms in the two industries. All that we have found so far points to one significant fact that the nature of firm ownership and industry are

not as significant factors in determining the patterns of methods in recruiting employees as that of the firm size.

As firms are classified by their sizes into small, medium and large using the number of their employees as a criterion for such classification(small = 50 and less than 50 employees, medium - more than 50 up to 200 employees, large - over 200 employees), the pattern emerges quite clearly that small firms tend to use more of informal channels for recruiting their employees while larger firms tend to depend more on formal channels, (see Table 21.2). It should be observed also the 5.80 per cent of employees recruited in small firms are supplied to them by head offices, while 3 per cent of new recruits in medium firms are supplied by the same method. None of the new recruitment in this category are found in large firms. This fact implies that all large firms observed in our study are more or less the head-offices in themselves (The average firm size in this category is the one that has 970 employees, see Table 22.4).

The next item to be investigated in this section is to find out the criteria in recruiting employees of firms by various classifications made earlier. This time we shall start from the firm size, which we have found earlier to be a dominant factor. It is found that while medium and large firms tend to attribute higher weight to work experience than academic qualifications, small firms tend to attribute equal weight to the two qualities. Perhaps, academic qualifications receive higher weight marginally than work-experience for small firms. This fact probably explains the reason why graduates prefer to launch their applications more with medium and small size firms than the large ones. Also, small firms attribute more weight to credits of referees than personalities and wit of their would-be employees than credits of referees.

The behaviour of small firms in attributing weights to different criteria for recruiting employees seems to be quite consistent with criteria anticipated by M.S.3 graduates, and the criteria set by medium

and large firms also quite consistent with the criteria anticipated by M.S.6 and DTE graduates. The only difference is that the M.S.6 and DTE graduates still attribute more weight to recommendations from friends and influential persons than good working records or guaranteed behaviour.

As the samples are classified by industry, it is found in addition that firms in secondary industry attribute substantive net higher weight to work experience than academic qualification while firms in tertiary industry react in opposite directions. The difference in emphasis between firms in the two industries can partly result from the difference in proportion of small firms within each industry. However, the figures seem to indicate more of the intrinsic nature of differences between the two industries by themselves more than the effect caused by different proportion of firm sizes within each industry. This claim is supported by the fact that the net difference in weights attributed to the two criteria (academic qualification and work-experience) for firms within each industry is much greater than the difference attributed to the two criteria within and between each pair of different firm size. The conclusion that the industrial effect is the dominant factor is also supported by the fact that the weight attributed between the other two criteria of referees and personalities and wit of the would-be employees for firms in tertiary sector does not pattern after the behaviour of small firms because more weight is attributed to the latter qualification in both cases. Therefore we can conclude with a high degree of confidence that industrial effect on the two criteria for recruiting the would-be employees is quite strong in this case.

When classification is made between domestic firms and foreign firms, as expected, foreign firms attach higher weight to work experience than that of academic qualification in comparison with the similar set of behaviour by domestic firms. This time the result can be explained by the fact that the true effect is caused by the evidence that foreign firms are firms in secondary industry and they are firms of medium and large sizes only. The firm size effect and industrial effect should have

dominant impact on how weights are attributed to different criteria for recruiting employees of firms in this category. Thus in the next section there will be classifications by industry and firm size only.

Table 21.4 shows the distribution of responses of employers as they were requested to evaluate the average performance of their vocational-graduate employees. The results indicate that domestic firms tend to be quite content with the quality of graduates while foreign firms do not provide equally good assessment on the performance of their vocational-graduate employees as that given by domestic firms. This fact seems to indicate foreign firms tend to employ persons with thigher educational qualifications more than domestic firms. When firms are classified into different industries, it is found in addition that firms in secondary industry appear to be more satisfied with the performance of vocational and technical graduates than firms in tertiary industry. Again, this result probably reflects the fact that firms in tertiary industry employ persons with higher educational qualifications more than firms in secondary industry. Also as expected small firms are more aatisfied with the performance of their vocational-graduate employees than medium-size firms and the contentment is more for the medium-size firms than that of the large ones, respectively.

When being requested to comment on the ability to apply the knowledge in their trade of vocational graduates, 54 per cent of firms seem to be satisfied with the performance of their employees, 38 per cent comment that these graduates only know theories without much ability to apply their trade. The comment on this point is not much difference between that of domestic firms and foreign firms. However domestic firms seem to be more satisfied with this quality of graduates than foregin firms, as expected.

Firms in tertiary industry appear to be more satisfied with the ability to apply knowledge of vocational graduates while firms in secondary industry seem to be less happy with this quality of graduates.

This result can be explained by the fact that firms in tertiary industry tend to place higher priorities on the academic qualification of their would-be employees than work experience. Therefore they do not have much to complain of the ability to apply their trade to vocational graduates. But for firms in secondary industry, they are probably more keen to be sure that their employed graduates are able to do practical work. As it turns out many of these graduates (52 per cent) may not be able to perform at the level expected from them by employers in this industry.

As samples are classified by firms size, it is found as expected, that small firms are more satisfied with the ability to apply knowledge of vocational graduates than medium-size firms. This result can be explained by two factors. The first and a conventional one is that vocational graduates employed in small firms tend to be the most well educated groups of employees. Therefore employers tend to be more satisfied with their qualification. The second reason is that proportionally more small firms are in tertiary industry. The industrial effect must have some influence on the result mentioned above. For medium-size firms, educational effect (more persons with higher educational qualifications are employed) and industrial effect probably operate in the opposite direction to that which happens in small firms. Thus only 46 per cent of medium size firms are satisfied with the ability to apply knowledge of vocational graduate. However, the result from large firms does not turn out to be as normally expected because 57 per cent of them are quite satisfied with this quality (ability to apply knowledge) of vocational graduates. This outcome can probably be explained by three other factors. Either the majority of large firms only employ graduates with some work experience or they probably do not assign any highly responsible position to new graduates or they out-compete smaller firms for better qualified graduates or the combination of the three that they have less to complain about this applicable ability of graduates than medium firms. It is also found later in this section (See Table 21.8) that more than 50 per cent of large firms have their own training

programmes. Thus, they probably are not too much concerned about the quality of their intakes.

A hypothetical question was posed to employers-did they think it would be of benefit to their businesses to hire M.S.3 graduates and give them on-the-job training at the going wage rate instead of employing M.S.6 and DTE at the wage rates paid to them then. The aim in asking this question is to find out whether employers would support on-the-job training at the going wage structure instead of employing vocational graduates that the government is the one who is responsible for the costs of their training presently. The results are presented in Table 21.6. Forty per cent of them report that it will not be profitable to their business, 25 per cent indicate that they would benefit more from the alternative method and another 24 per cent report that it would be different for them. If this is the case, namely, about 49 per cent would either be indifferent or more profitable, the government should try to find some means to allocate some the training responsibilities to the firms themselves because part of the training offered by the government through vocational and technical institutions is obviously wasteful. Of course, the fact that about 40 per cent report that it would not be profitable for them indicates that many of these firms still prefer the present arrangement.

As the samples are classified into domestice and foreign firms, higher percentage (40.54) is found to be reported by domestic firms in the category of "not profitable" while only 33.33 per cent of the foreign firms report so. This means that foreign firms do not attribute as much to the improvement in quality of training of graduates provided by the system of vocational and technical education as demestic firms. If this is the case there should be measurements to encourage foreign firms to train their own employees. The answers in this part for other classification is quite consistent with the answers of employers on the ability to apply knowledge of graduates. If employers

are quite satisfied with the ability of their employees they would tend to answer that it would not be profitable for them to undertake on-the-job training programmes by themselves. As a result, smaller percentages of firms in secondary industry (33.82) answer that it would not be profitable to them while firms in tertiary industry attribute higher weight (43.33 per cent) to this answer. The results, from the calssification by firm size, turn out to be as expected, namely, small firms attribute higher weight (40.00 per cent) to this answer of "not profitable" to them, while medium firms attribute lower weight (35.85 per cent) and large firms, again attribute higher weight (50.00 per cent) to this answer.

Employers were then requested to make a comparison between the difference in job performance between the M.S.3 and M.S.6 graduates in the same track of study and M.S.6 and DTE graduates of the same nature. The results are quite clear and quite consistent for all groups of classification that the difference in job performance between that of the DTE and M.S.6 graduates is definitely more significant than that between M.S.6 and M.S.3 graduates. While 50.31 and 30.43 per cent of weights are attributed to the answer of "little difference" and "great difference" between the pair of M.S.3 and M.S.6 graduates respectively, the respective weights of 45.91 and 38.99 per cent are attributed to the pair of M.S.6 and DTE graduates. The lower percentage attributed to the answer of "little difference" and the higher percentage attributed to the answer of "great difference" indicate that the difference in the second pair is definitely greater than the first one. As already mentioned, this pattern of difference is consistent for all groups of the classification.

It should be observed in addition that foreign firms are quite keen to indicate these differences discreetly. For the pair of M.S.6 and M.S.3 graduates the respective weights of 61.54 and 23.28 per cent are attributed by these foreign firms while the respective weights of 38.46 and 53.85 percent are attributed to the pair of M.S.6 and DTE

graduates. The solid implication from this finding is that from the point of view of employers, higher levels of training are far better in proportion than the lower ones.

Table 21.8 presents facts relating to willingness of employers to organize their own training programmes for their employees. When being asked whether they have any problems in selecting qualified applicants, 68.26 per cent of them supply negative responses. This high negative response is quite consistent for all groups of classification with the exception of firms in tertiary industry and medium size firms that the negative responses are lower than the average. As the employers are asked further whether they consider the current curriculum of vocational well serving the needs of their firms, almost 80 per cent provide an affirmative response. Again, the proportion is consistantly high for all groups of the classification. These two sets of answers imply that although employers are not quite fully satisfied with the performance of vocational graduates especially with the ability to apply their trade and they have gone further as 49 per cent of them indicate that they would be either more profitable or indifferent from organizing their own training programmes for their M.S.3 employees. Yet, they are not quite willing to set up their own training programmes. The said two answers indicate this tendency since they indicate that they have only little problems in selecting qualified applicants and are quite satisfied with the current curriculum.

The reasons explaining such attitudes of employers is because the majority of them still do not have their own training programmes. Sixty one per cent report that they have no training programmes of their own. Again, the distribution of this answer is quite even for all groups of the classification with the exception of large firms which 54.55 per cent of them report that they have their own training programme. This is probably one of the reasons explaining why large firms are more happy with the qualifications of vocational and technical graduates, since they can train their own employees for the jobs required by them afterward.

Employment Structure of Firms.

In this section firms are classified into two categories, namely, firms that employ vocational and technical graduates and firms that do not do so. Table 22.2 presents the distributions of employees by various classifications of graduates classified by industry and firm size. It should be quite interesting to first observe the average firm-sizes of firms in the two categories in this section of the study. The results are shown in Table 22.4. For firms that do not employ vocational and technical graduates, the average firm-sizes for small, medium-size, and large firms are 16, 87, and 338 employees respectively. The average firm-sizes for firms that employ vocational and technical graduates are, 13, 90, and 970, respectively.

The first contrasting feature between firms in the two categories that can be observed right away is that a "large" firm in the firm category that does not employ vocational and technical graduates is not that large in comparison with a large firm in other categories. This outcome is reflected by the fact that if a firm of the first category needs to increase its scale of production it must employ some number of specialized trained personnel and hence will be no longer a member of firms in the first category. This fact indicates the point of the upper limit in scale of production of the so-called "labour intensive" firm, if no alteration in production method is made.

The second point observed from Table 22.4 is that firms that do not employ vocational or technical graduates tend to employ higher proportion of persons with lower educational qualifications for all classifications of firm size than firms of the same classifications in the other category. This fact indicates clearly the nature of the more labour "intensiveness" of firms in the first category for all classifications of firm size.

Table 22.3 provides additional information on the distribution of employees classified by levels of their formal training employed in firms of different firm-size for firms that do not employ vocational and technical graduates. It is quite clear from the results in this table that there are no distinctive patterns of employment among firms of three size in this category. The only difference in nature of firms of the three sizes is the increasing intensiveness of labour with lower levels of education employed in the production process. The percentage of the so called "unskilled" workers increases each time when firm size changes from small to medium and large respectively (83.66, 87.94 and 95.86 percent respectively). The change in firm size in this case reflects more of the fact that firms of large size only try to take advantage gained from the increased scale of production without making any attempt at the alteration of production technique. According to our observation the optimum size of firms in this category is the one that probably employs not more than 400 employees.

Reasons given by firms in this category for not employing vocational or technical graduates are as follows;

		Number of Responses
(i)	Do not need educated workers	(29)
(ii)	Vocational and technical graduates probably know enough theories but lack of experience and skills repuired by the firms.	(22)
(iii)	The firm size is so small that vocational graduates are not needed.	(18)
(iv)	It will unnecessarily increase the costs of production.	(15)
(v)	These vocational graduates normally do not have enough patience for the kind of work assigned and tend to be less obedient than those who have less education.	(15)
(vi)	Have never been approached for jobs by graduates.	(6)

For firms that employ vocational and technical graduates, they tend to be firms that do not employ "unskilled" worked" workers as intensively as firms in the first category. Small firms in this category employ less than 50 per cent of unskilled labour and more than 50 per cent of their employers are those who have their secondary and higher education (see Table 22.2). Small firms in this category appear to contain high proportions of firms in tertiary industry. Medium-size firms in this category share one common feature with firms in the other category, namely, that they probably contain more proportion of firms in secondary industry and some in primary industry. The common feature of firms in both categories is that they employ quite a high proportion of "unskilled" workers, (61.21 per cent). The difference between firms in the two categories could probably be that the producation method used by firms in this category must be less "labour intensive" than the other one.

Large firms in this category probably contain the mixed proportion of firms in secondary and tertiary industry. Their structure appears to be the replica of small firms but taking the advantage from the much larger scale of production that they employ a little smaller proportion of graduates at secondary and higher education levels in comparison with that of small firms.

Classified by levels of education ofvocational and technical graduates employed by firms of these three sizes , it is found in addition that the highest proportion (66.34, 58.21 and 61.87 per cent) of the M.S.6 graduates are employed by firms of the three sizes . The highest percentage of M.S.3 and M.S.6 graduates are employed in small firms (80.20), and the highest percentage of the M.S.6 and DTE graduates are employed in large firms (91.49). The average level of education of vocational and technical graduates employed by medium-size firms is in the middle range.

Comparatively, the highest percentage of female graduates are employed in small firms (41.25). Medium-size and large firms only

employ 30.29, and 31.41 per cent of female graduates respectively. The highest percentage of graduates in agriculture is employed in medium-size firms (4.91). For graduates in commerce, the percentage employed in small firms is the highest (72.61). The figures reduce as the size of firms increase (63.11 and 56.46 per cent for those employed in medium-size and large firms respectively). This fact indicates in addition that there is a scale factor in employing graduates in commerce. However, the highest percentage of graduates in commerce employed in small firms also results from the fact that firms in this classification contain high proportions of firms in tertiary industry which usually employ high percentage of graduates in commerce (78.62, See Table 22.2).

As for graduates in manufacturing and industry, the pattern of distribution is in the reversed order namely lower percentages of them are employed in small firms (25.41), and 29.61 and 40.35 per cent respectively are employed in medium-size and large firms. This outcome, again, results from the fact that high proportions of medium-size and large firms are firms in secondary industry. The result that we have just found indicates, in addition, the increasing intensity in the utilization of training skills of this group of graduates as the scale of production of the firm increases.

Classified by position, about 5 to 6 percent of graduates distribute quite evenly among the three firm sizes as chief supervisors. The highest percentage are employed in medium size firms (15.74) as assistant supervisor, and the other highest percentage (14.13) are employed in large firms as shop stewards. About 60 per cent of them are employed in small and medium size firms as clerks. And as expected, there is a higher possibility for a vocational or technical graduates to be promoted to the position of an executive in small firms, 8.58 per cent.

Classified by industry, it is found in addition that the highest percentage of "unskilled" labour are employed in secondary industry. This result is hardly surprising. However, the surprising outcome is

that "primary" industry only employs 21.85 per cent of "un-skilled" labour. This result clearly indicates that the sample of "primary" industry in our study by no means reflects or represents its parent population. This outcome results from the fact that our observations were collected mainly from firms located in "big cities", or municipal areas. In order to represent the true population, closely to our collected sample the term "primary" industry adopted here should be called "mechanized" or "advanced" primary industry. Therefore any conclusions made about this industry from the findings of this study must take into consideration this shortcoming as well.

The patterns of distribution of employees classified by level of education are quite distinctive between firms in secondary and tertiary industries. Firms in tertiary industry employ more in proportion of graduates at higher levels of education than firms in secondary industry. This fact probably helps explain why firms in tertiary industry normally prefer academic qualification of their employees to work-experience. As expected, firms in tertiary industry employ higher percentage of M.S.6 and DTE graduates than firms in secondary industry. Firms in "primary" industry employ the highest percentage of these two groups of graduates but it should be understood that this must be the exceptional case and should not be generalized for the whole primary industry.

The highest percentage of female graduates are employed in tertiary industry (38.05). The highest percentage of graduates in agriculture are employed in primary industry and the highest percentages of those in commerce and manufacturing and industry are employed in tertiary and secondary industries (78.62 and 60.53), respectively. The results found in these two classifications about sex and track of study of graduates are quite straight forward as expected. The highest percentage of graduates in home economics(3.77), in relative terms, are also found to be employed in primary industry. None of the graduates in arts are found to be employed in primary industry.

The highest percentage of graduates in agriculture employed in primary industry are employed as shop-stewards. Majority of graduates employed in tertiary industry are employed as clerks (65.49). The highest chances for graduates to be promoted as an executive is in tertiary industry - 10.36 percent. In secondary industry, shop-stewards and clerks are the most common positions for graduates or 55.80 per cent. Chances for graduates to be promoted to the position of executive is quite low (2.89 per cent) in this industry.

The information about employment structure of firms and industries that employ vocational and technical graduates explained above covers those in the private sector only. The similar employment structure of graduates employed in the public sector is also available from the S.75 as well. Unfortunately, the results are not ready in a presentable form at the time this study is finishing.

Nevertheless, it should be mentioned that the distribution of employment structure of firms in the private sector presented in Table 22.2 together with similar distributions tabulated from information collected from the public sector, will form into employment structure of vocational and technical graduates of the Thai economy, given all shortcomings mentioned earlier. These two sets of information (employment structure in both public and private sectors) should be most valuable for future planning on how many graduates should be produced in each track of study at different level of education. The main task of this study is to provide basic sets of information necessary for more systematic analyses to be carried out afterwards in this direction. To this end this study has already achieved what it aimed to complete.

TABLE 9.1

FUTURE PLANS OF M.S.3 STUDENTS IN COMPREHENSIVE EDUCATION CLASSIFIED BY BY SEX (1975)

Sex	Work Only	Work and Study Part-Time				Study Full-Time				Total	Percentage Distribution			Percentage Distribution of those who will Study Full Time			Total
		Total	Academic	Vocational	Others	Total	Academic	Vocational	Others		Work Only	Study Past-time	Study Full-Time	Academic	Vocational	Others	
Male	0	9	1	7	1	49	23	20	6	58	0.00	15.52	84.48	46.94	40.82	12.24	100.00
Female	0	9	3	4	2	51	24	25	2	60	0.00	15.00	85.00	47.06	49.02	3.92	100.00
Total	0	18	4	11	3	100	47	45	8	118	0.00	15.25	84.75	47.00	45.00	8.00	100.00

TABLE 9.2

PREFERENTIAL DISTRIBUTION OF REASONS FOR CONTINUING OR NOT CONTINUING EDUCATION OF M.S.3 STUDENTS IN COMPREHENSIVE EDUCATION (1975)

Sex	Reasons for not Studying Full-Time *					Reasons for Selecting Academic Stream **						Reasons for Selecting Vocational Stream ***					
	1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	6
Male	2	1	5	3	0	46	52	17	8	12	2	79	54	33	7	12	0
Female	0	0	5	6	0	65	56	22	4	12	2	77	56	23	13	12	11
Total	2	1	10	9	0	111	108	39	12	24	4	156	110	56	20	24	11

* 1. There is no advantage to be gained from studying since it is not practical .

2. I have no interest to study .

3. I have a financial problem .

4. It is better to get out to work to gain more practical knowledge and money.

5.5 Others .

** 1. It is my own preference.

2. There is higher opportunity to continue at higher level.

3. There is a higher opportunity to get a degree.

4. It seems that everyone is attending academic stream and I want to do so too.

5. I do not like vocational education at all

6. Others

***1. It is my own preference

2. I think is easier than academic stream

3. It is harder for academic stream graduates to find jobs

4. Academic stream graduates get lower pay than vocational stream graduates at the same level of education

5. I just want to study since I have no specific plan

6. Vocational stream take less number of years to be analysed to a reasonible

TABLE 10.1

DISTRIBUTIONS OF SAMPLES OF M.S.6 AND DTE GRADUATES (1975)

Track of Study	Levels of Education					
	M.S.6			DTE		
	Male	Female	Total	Male	Female	Total
Agriculture	20	1	21	13	2	15
Commerce	47	44	91	24	23	47
Manufacturing and Industry	63	6	69	35	3	38
Home Economics	5	35	40	2	11	13
Arts	13	5	18	21	2	25
Total	148	91	239	95	41	136

TABLE 10.2-A

FUTURE PLANS OF M.S.6 STUDENTS CLASSIFIED BY SEX(1975)

Sex	Work Only	Work and Study Part-Time							Study Full-Time							Total
		In Thailand			Oberseas				In Thailand			Overseas				
		Total	Voca-tional	Academic	Total	Voca-tional	Academic	Others	Total	Voca-tional	Academic	Total	Voca-tional	Academic	Others	
Male	4	9	9	-	7	1	-	6	28	25	3	18	3	-	15	66
Female	2	7	5	2	1	-	-	1	18	18	-	7	3	-	4	35
Total	6	16	14	2	8	1	-	7	46	43	3	25	6	-	19	101

TABLE 10.2-B

PERCENTAGE DISTRIBUTION OF FUTURE PLANS OF M.S. 6 STUDENTS CLASSIFIED BY SEX (1975)

Sex	Work Only	Work and Study Part-Time				Study Full- Time				Total
		Total	In Thailand		Overseas	Total	In Thailand		Overseas	
			Vocational	Academic			Vocational	Academic		
Male	6.06	24.25	13.64	-	10.61	69.69	37.88	4.54	27.27	100.00
Female	5.71	22.86	14.29	5.71	2.86	71.43	51.43	-	20.00	100.00
Total	5.94	23.76	13.86	1.98	7.92	70.30	42.58	2.97	24.75	100.00

TABLE 10.3

PREFERENTIAL DISTRIBUTION OF REASONS FOR CONTINUING OR NOT CONTINUING EDUCATION OF THE M.S.6 STUDENTS CLASSIFIED BY SEX (1975)

Sex	*Reasons of M.S.3 Academic Graduates for not Studying in Academic Stream				**Reasons for not Studying Part of Full - Time					***Reasons for Selecting Academic Stream						****Reasons for Selecting Vocational Stream					
	1	2	3	4	1	2	3	4	5	1	2	3	4	5	5	1	2	3	4	5	6
Male	3	8	0	0	0	0	17	6	1	2	2	3	0	3	3	151	55	36	61	27	6
Female	1	1	0	0	0	0	8	3	1	3	4	3	0	0	0	75	41	8	36	12	2
Total	4	9	0	0	0	0	25	9	2	5	6	6	0	3	3	226	96	44	97	39	8

* 1. I think I am not capable to continue
2. I had tried but I could not go on
3. I could not enter M.S.4 (academic stream)in public school
4. I prefer vocational subjects.

** 1. There is no avantage to be gained from studying since it is not praclical
2. I have no interest to study
3. I have a financial problem
4. It is better to get out to work to gain more practical knowledge and money
5. Others

***1. It is my own preference
2. I just want to get a degree
3. University graduates are highly respected and have higher opportunity to make then progress
4. It seems that everyone wants to study in the University and I want to do too
5. I do not like vocational education at all
6. Others

****1. It is my own preference
2. I think I am not capable for University Education
3. A degree would not help to find a job
4. A degree in the field that I want to do would not get a good pay as vocational education
5. I just want to study since I have no specific plan
6. Other

TABLE 10.4-A

FUTURE PLANS OF M.S.6 STUDENTS CLASSIFIED BY TRACK OF STUDY

(1975)

Track of Study	Work Only	Work and Study Part-Time							Study Full - Time							Total
		In Thailand			Overseas				In Thailand			Overseas				
		Total	Voca-tional	Academie	Total	Voca-tional	Academic	Others	Total	Voca-tional	Academic	Total	Voca-tional	Academic	Others	
Agriculture	-	-	-	-	-	-	-	-	1	1	-	3	1	-	2	4
Commerce	4	6	4	2	4	1	-	3	8	7	1	8	2	-	6	30
Manufacturing and Industry	2	9	9	-	3	-	-	3	22	21	1	10	2	-	8	46
Home Economics	-	1	1	-	1	-	-	1	11	11	-	3	1	-	2	16
Arts	-	-	-	-	-	-	-	-	4	3	1	1	-	-	1	5
Total	6	16	14	2	8	1	-	7	46	43	3	25	6	-	19	101

TABLE 10.4-B

PERCENTAGE DISTRIBUTION OF FUTURE PLANS OF M.S.6 STUDENTS CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	Work Only	Work and Study Part-Time				Study Full Time				Total
		Total	In Thailand		Overseas	Total	In Thailand		Overseas	
			Vocational	Academic			Vocational	Academic		
Agriculture	-	-	-	-	-	100.00	25.00	-	75.00	100.00
Commerce	13.33	33.33	13.33	6.67	13.33	53.34	23.33	1.34	26.67	100.00
Manufacturing and Industry	4.35	26.09	19.57	-	6.52	69.56	45.65	2.17	21.74	100.00
Home Economics	-	12.50	6.25	-	6.52	87.50	68.75	-	18.75	100.00
Arts	-	-	-	-		100.00	60.00	20.00	20.00	100.00

TABLE 10.5

PREFERENTIAL DISTRIBUTIONS OF M.S.6 STUDENTS REGARDING THEIR SELECTED TRACK OF STUDY, CURRICULUM, AND THEIR OPINIONS TOWARD FUTURE WORK (1975)

Track of Study	* Why this track is selected ?					**How about the present curriculum? Whether it is helpful for you future wole ?					***What is your suggestion for the improvement of present curriculum?						****What should be the job ideal kind of your future			
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	1	2	3	4
Agriculture	0	0	0	0	0	4	1	1	0	1	2	3	0	0	0	0	7	0	0	0
Commerce	1	2	0	0	0	19	6	7	1	0	17	16	5	2	0	0	30	1	1	0
Manufacturing and Industry	3	7	0	-	0	32	8	5	1	0	12	13	0	2	3	0	42	1	1	0
Home Economics	0	2	0	2	0	12	2	3	1	0	5	8	2	0	2	1	16	1	1	0
Arts	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	5	0	0	0
Total	4	11	0	2	0	68	19	16	3	1	36	36	7	4	5	1	100	3	3	0

* 1. I can easily find job with this qualification
2. I prefer to do this course
3. I think this course is the easiest
4. I had no specific plan
5. Others

** 1. Yes, definitely
2. Not certain
3. It would not help to have practical skills in any particular field
4. Reasonably helpful
5. There is no definite objective from the the present curriculum.

*** 1. Reduce academic subjects and increase practical section
2. Actual practical training should be emphasiged by cooperations from private firm
3. No.Academic subjects should be taught at this level
4. Increase both practical sections and academic subjects
5. There should be close relationships between theories and practices

**** 1. It should be the kind of job where I can apply my knowledge and skills
2. Any kind of job with reasonable pay
3. Any kind of job at all
4. Others

TABLE 11.1-A

FUTURE PLANS OF DTE STUDENTS CLASSIFIED BY SEX (1975)

Sex	Stream of Secondary Education (4)		* Reasons for not Enroling in University (5)					Do you want to contime Studying ? (9)		** Why don't you want to work now ? (10)					*** What should be the ideal kind of your future job? (11)			
	Vaca-tional	Academic	1	2	3	4	5	Yes	No.	1	2	3	4	5	1	2	3	4
Male	85	2	1	3	2	6	3	72	15	45	17	4	3	3	74	10	3	-
Female	28	1	-	-	2	6	1	26	3	19	5	2	-	-	29	-	-	-
Total	113	3	1	3	4	12	3	98	18	64	22	6	3	3	103	10	3	-

*
1. I could not pass the entrance examination
2. I don't think I would be successful Y I did.
3. It is hard to find jobs for University graduates and also the pay rate is lower.
4. I prefer vocational stream to academic stream
5. I have financial problem.
6. Others

**
1. I still want to study and I am capable of doing so.
2. With my present qualification. I will not make much progress
3. I just want to get a degree since it is highly recognized for getting a good job.
4. I don't think I can get a job now although I would like to get one.
5. Others.

***
1. It should be a kind of job where I can apply my knowledge and skill that I have studied
2. Any kind of job with reasonable pay
3. Any kind of job at all.
4. Others

TABLE 11.1-B

PERCENTAGE DISTRIBUTIONS OF FUTURE PLANS OF DTE STUDENTS CLASSIFIED BY SEX (1975)

Sex	Stream of Secondary Education (4)		* Reasons for not Enroling in a University (5)					Do you want to Continue Studying ? (9)		** Why don't you want to work now ? (10)					*** What should be the ideal kind of you future job? (11)			
	Vocational	Academic	1	2	3	4	5	Yes	No.	1	2	3	4	5	1	2	3	4
Male	97.70	2.30	6.67	20.00	3.33	40.00	20.00	82.76	17.24	62.50	23.61	5.55	4.17	4.17	85.06	11.49	3.45	-
Female	96.55	3.45	-	-	22.22	66.67	11.11	89.66	10.34	73.08	19.23	7.69	-	-	100.00	-	-	-
Total	97.41	2.59	4.00	12.00	16.00	48.00	12.00	84.48	15.52	65.31	22.45	6.12	3.06	3.06	88.79	88.79	2.59	-

*

1. I could not pass the entrance examination
2. I don't think I would be suceessful'Y I did
3. It is hard to find jobs for University graduates and also the pay rate is lower
4. I prefer vocational stream to academic stream.
5. I have financial problem.

**

1. I still want to study and I am capable of doing so.
2. With my preasent qualification I will not make much progress.
3. I just want to get a degree since it is highly recognized for getting a good job.
4. I don't think I can get a job now although I would like to get one.
5. Others.

***

1. It should be a kind of job where I can apply my knowledge and skill that I have studied.
2. Any kind of job with reasonable pay.
3. Any kind of job at all.
4. Others.

TABLE 11.2

PREFERENTIAL DISTRIBUTIONS OF DTE STUDENTS REGARDING THEIR SELECTED TRACK OF STUDY, CURRICULUM CLASSIFIED BY TRACK OF STUDY (1975)

rack of tudy	* Why this track of study is selected ? (6)				** How about the present curriculum? Whether it is helpful for your future work ? (7)				*** What is your suggestion for the improvement of present curriculum ?			
	1	2	3	4	1	2	3	4	1	2	3	4
griculture	9	46	3	2	51	4	10	0	2	4	0	0
ommerce	7	10	-	-	16	1	0	0	0	0	0	0
lanufacturing nd Industry	5	16	1	-	17	2	3	0	2	0	0	0
lome Economics	1	3	1	-	3	0	2	0	0	2	0	0
rts	3	5	1	-	6	1	2	0	0	0	0	0
otal	25	80	6	2	93	8	17	0	4	6	0	0

*
1. I can easily find a job with this qualification.
2. I prefer to do this course.
3. I think this couse is the easiest
4. Others

**
1. Yes, definitely
2. Not sure
3. It would not help to have practical skills in any particular field because the courses too academic
4. Others

***
1. Reduce academic subjects and increase practical sections
2. Actual training should be emphasized by cooperation from private sector
3. No academic subject should be taught at these leval
4. Others

TABLE 12.1

PREFERENTIAL DISTRIBUTION OF COMMENTS ON CURRICULUM OF THE M.S.6 GRADUATES CLASSIFIED BY TRACK OF STUDY

(1975)

Track of Study	Whether Vocational Traning is Useful for Your First Job? (15)		Do you Have Any Conments on the Curriculum of Your Training ? (16)							
				Yes						
	Yes	No.	No.	Too Many Theoretical Lessons and only Little Practice	Too Much Practice and Too Little Theoretical Lessons Are Taught	Unnecessary and Too Long Training Course Period	Not Enough Work-shop Examples Too Little Work-shop Practice	Too Much of a Little Bit of Each Lesson Not Enough Knowledge on Any Specific Thing	Not Much Useful Because I was Not Employed in the Position Which Required Training in My Track of Study	Curriculum was not Geared to Meet the Demand in Job Markets
Agriculture	18	3	10	16	3	4	24	16	6	0
Commerce	85	2	41	86	13	28	71	44	1	3
Manufacturing and Industry	58	7	27	65	10	17	63	24	5	10
Home Economics	31	7	22	26	5	6	16	27	0	0
Arts	16	-	7	23	3	3	13	5	0	0
Total	207	19	107	216	34	58	187	116	6	13

TABLE 12.2

PREFERENTIAL DISTRIBUTION OF COMMENTS ON CURRICULUM OF DTE GRADUATES CLASSIFIED BY TRACK OF STUDY (1975)

rack of tudy	Whether Vocational Traning is Useful for Your First Job? (15)		Do you Have Any Comments on the Curriculum of Your Training? (16)							
				Yes						
	Yes	No.	No.	Too Many Theoretical Lessons only Little Practice	Too Much Practice and Too Little Theoretical Lessons Are Taught	Unnecessary and Too Long Training Course Period	Not Enough Wrok-shop Examples Too Little Work-shop Practice	Too Much of a Little Bit of Each Lesson Not Enough Knowledge on Any Specific Thing	Not Much Useful Because I was Not Employed in the Position Which Required Training in My Track of Study	Curriculum was not Geared to Meet the Demand in Job Markets
griculture	13	4	6	14	0	6	12	9	2	3
ommerce	41	1	19	45	8	14	33	11	0	0
anufacturing nd Industry	33	2	13	45	9	7	39	21	1	0
ome Economics	9	3	5	7	4	5	14	8	0	0
rts	17	1	6	19	1	5	21	6	0	5
otal	113	8	49	130	22	37	119	5	3	8

TABLE 13.1

GENERAL OPINIONS OF M.S.3 GRADUATES CONCERNING THEIR PREVIOUS EDUCATION CLASSIFIED BY SEX (1975)

Sex	Do You Think If Your Have Stridied at Higher Level Would Help You in Your Career ? (11)				* Reasons for Not Continuing At Highes Levels of Education (12)							
	Yes	No.	No.Conment	Others	1	2	3	4	5	6	7	8
Male	21	162	6	2	422	81	75	72	138	33	4	12
Female	13	75	9	1	190	50	40	44	92	11	7	6
Total	34	237	15	3	612	131	115	116	230	44	11	18

*

1. I had financial problem.
2. It would have been harder to get a Job y I continued Studying
3. I didn't think I would have gained more practical knowledge.
4. I did not like to study
5. I thought I was not capable to continue studying
6. At that time M.S.3 level was quite highly qualified to get a job.
7. I had a health problem.
8. I had to save up before I could continue my study and I am saving up now.

TABLE 13.2

GENERAL OF M.S.6 GRADUATES CONCERNING THEIR PREVIOUS EDUCATION CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	* Before You Decide to Select a Vocational Stream. Do You Have Any Desire to Study Academic Subjects? (17)								** Are You Thinking of Attending Ramkamhang University or Other Higher Academic Institution? (20)				
	No.	Yes							No.	Yes			
		1	2	3	4	5	6	7		1	2	3	4
Agriculture	10	1	3	2	1	1	-	4	10	2	4	4	1
Commerce	54	5	12	2	7	1	-	10	38	3	24	21	5
Manufacturing and Industry	45	-	4	1	9	-	-	9	44	1	10	10	2
Home Economics	17	5	5	2	5	-	-	7	18	1	9	9	3
Arts	12	-	2	-	1	-	-	2	8	-	7	7	1
Total	138	11	26	7	23	2	-	32	115	7	54	54	12

*
1. It was my own preference.
2. I would like to have higher education
3. I did not like vocational education
4. Academic Education provides better opportunity to progression the long run.
5. I had ability to do so.
6. I was pursuaded by friends
7. Others.

**
1. I like to study
2. I want to be promoted
3. It should be quite useful.
4. Others

TABLE 13.3

PERCENTAGE DISTRIBUTIONS OF GENERAL OPINIONS OF M.S.6 GRADUATES CONCERNING THEIR PREVIOUS EDUCATION CLASSIFIED BY TRACK OF STUDY(1975)

Track of Study	*Before You Decide to Select a Vocational Stream. Do You Have Any Desire to Study Academic Subjects? (17)								**Are You Thinking of Attending Ramkamhang University or Other Higher Academic Institution ?(20)				
	No.	Yes							No.	Yes			
		1	2	3	4	5	6	7		1	2	3	4
Agriculture	45.45	4.55	13.64	9.09	4.55	4.55	-	18.18	47.62	9.52	19.05	19.05	4.76
Commerce	59.34	5.49	13.19	2.20	7.69	1.10	-	10.99	41.76	3.30	26.37	23.08	5.49
Manufacturing and Industry	66.18	-	5.88	1.47	13.24	-	-	13.24	65.67	1.49	14.93	14.93	2.99
Home Economics	41.46	12.20	12.20	4.88	12.20	-	-	17.07	47.37	2.63	23.68	18.42	7.89
Arts	70.59	-	11.76	-	5.88	-	-	11.76	44.44	-	38.89	11.11	5.56
Total	66.03	5.26	12.44	3.35	11.00	0.96	-	15.31	49.57	3.02	23.28	18.97	5.17

*
1. It was my own preference
2. I would like to have higher education
3. I did not like vocational education
4. Academic education provides better opportunity to progress in the long run
5. I had ability to do so.
6. I was persuaded by friends
7. Others

**
1. I like to study
2. I want to be promoted
3. I should be quite useful
4. Others

TABLE 13.4

GENERAL OPINIONS OF DTE GRADUATES CONCERNING THEIR PREVIOUS EOUCATION CLASSIFIED BY TRACK OF STUDY(1975)

Track of Study	*Before You Dicide to Selecta Vocational Stream. Do You Have Any Desire to Study Academic Subjects ? (17)								**Are You Thinking of Attending Ramkamhaeng University or Other Higher Academic Institution (20)				
	No.	Yes							No.	Yes			
		1	2	3	4	5	6	7		1	2	3	4
Agriculture	8	1	1	-	5	-	-	-	4	2	3	5	1
Commerce	19	3	9	2	10	-	-	4	28	2	9	7	2
Manufacturing and Industry	29	-	4	2	2	-	1	1	17	2	8	10	1
Home Economics	4	2	4	-	2	-	1	-	7	1	2	5	-
Arts	18	-	3	-	1	-	1	-	9	1	7	5	-
Total	78	6	21	4	20	-	3	5	65	8	29	32	4

*
1. It was my own preference
2. I would like to have higher Education
3. I did not like vocational education
4. Academic education provides better opportunity
4. to progress in the long run
5. I had ability to do so
6. I was pursuaded by friends
7. Others

**
1. I like to study
2. I want to be promoted
3. It should be quite useful
4. Others

TABLE 13.5

PERCENTAGE DISTRIBUTIONS OF GENERAL OPINIONS OF DTE GRADUATES CONCERNING THEIR PREVIOUS EDUCATION CLASSIFIED BY TRACK OF STUDY(20)

Track of Study	* Before You Decide to Select a Vocational Stream. Do You Have Any Desire to Study Academic Subjects ? (17)								** Are You Thinking of Attending Ramkamhaeng University or Other Higher Academic Institutions ?(20)				
	No.	Yes							No.	Yes			
		1	2	3	4	5	6	7		1	2	3	4
Agriculture	53.33	6.67	6.67	-	33.33	-	-	-	26.67	13.33	20.00	33.33	6.67
Commerce	40.43	6.38	19.15	4.20	21.28	-	-	8.51	58.33	4.17	18.75	14.58	4.17
Manufacturing and Industry	74.36	-	10.26	5.13	5.13	-	2.56	2.56	44.74	5.20	2.11	26.32	2.63
Home Economics	30.77	15.38	30.77	-	15.38	-	7.69	-	46.67	6.67	13.33	33.33	-
Arts	78.26	-	13.04	-	4.35	-	4.35	-	40.91	4.55	31.82	22.73	-
Total	56.93	4.38	15.33	2.92	14.60	-	2.19	3.65	47.10	5.80	21.01	23.19	2.90

*
1. It was my own preference
2. I would like to have higher education
3. I did not like vocational education
4. Academic education provides bettes opportunity to progress in the long run
5. I had ability to do so.
6. I was pursuaded by friends
7. Others

**
1. I like to study
2. I want to be promoted
3. It should be quite useful
4. Others

TABLE 14.1

METHOD FOR SECURING THE FIRST JOB AND FACTOR THAT HELPS SECURING THE JOB IN EMPLOYEES ' OPENION OF M.S.3 GRADUATES CLASSIFIED BY SEX (1975)

Sex	* How Do You Secure Your First Job ? (7)								** Factor That Help You Securing Your First Job (10)					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6
Male	50	4	57	4	61	9	9	-	377	319	217	25	186	4
Female	33	1	24	-	35	4	1	-	182	159	93	24	115	3
Total	83	5	81	4	96	13	10	-	559	478	310	49	30	7

*
1. I made my own inquiries
2. Through advertisement on news-papers or radio
3. Through a friend
4. Through employment office (government /private)
5. By personal influence of the influential person
6. Through my school or teachers
7. I had my own business
8. Others

**
1. Knowledge or special knowledge
2. Work experience
3. Recommendation from friends or influential persons
4. Financial guarantee
5. Good working record or guaranteed behavior
6. Others

TABLE 14.2

METHOD FOR SECURING THE FIRST JOB AND FACTOR THAT HELPS SECURING THE JOB IN EMPLOYEES'OPINION OF M.S.6 GRADUATES CLASSIFIED BY TRACK OF STUDY(1975)

Track of Study	How Do You Secure Your First Job ?								Factor That Help You Securing Your First Job.					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6
Agriculture	5	2	8	1	4	1	-	-	45	35	22	4	13	0
Commerce	15	10	32	-	19	9	1	1	152	164	95	17	76	3
Manufacturing& Industry	22	1	24	-	6	8	3	1	126	128	59	6	49	8
Home Economics	14	2	14	-	4	3	1	-	76	65	47	7	26	0
Arts	7	-	6	-	2	21	1	-	28	40	14	1	12	0
Total	63	18	84	1	35		6	6	427	432	237	35	176	11

*
1. I made my own inquiries
2. Through advertisement of news-papers or radio
3. Through a friend
4. Through employment office (government/private)
5. By personal influence of the influential person
6. Through my school or teachers
7. I had my own business
8. Others

**
1. Knowledge or special knowledge.
2. Work experience
3. Recommendation from friends or influential persons
4. Financial guarantee
5. Good working record or guaranteed behavior
6. Others

TABLE 14.3

METHOD FOR SECURING THE FIRST JOB AND FACTOR THAT HELPS SECURING THE JOB IN EMPLOYEES' OPINION OF DTE GRADUATES CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	* How Do You Secure Your First Job ? (9)								** Factors That Help You Securing Your First Job(17)					
	1	2	3	4	5	6	7	8	1	2	3	4	5	6
Agriculture	5	-	6	1	2	-	-	-	28	20	16	5	14	0
Commerce	10	4	15	-	8	3	1	1	74	72	48	8	32	7
Manufacturing and Industry	15	1	10	-	4	3	1	1	77	66	27	1	25	3
Home Economics	1	1	6	-	3	1	-	1	20	24	18	2	7	1
Arts	3	1	11	-	-	2	1	-	30	47	22	4	9	2
Total	45	7	48	1	17	9	3	2	229	229	131	20	87	13

*
1. I made my own in quiries
2. Through advertisement on news-papers or radio
3. Through a friend
4. Through employment office (government/private)
5. By personal influence of the influential person
6. Through my school or teachers
7. I had my own business
8. Others

**
1. Knowledge or special knowledge
2. Work experience
3. Recommendation from friends or influential persons
4. Financial guarantee
5. Good working record or guaranteed behavior
6. Others

TABLE 15.1

OPINIONS OF M.S. 6 GRADUATES RELATING TO THEIR TRAINING AND THE NATURE OF THEIR WORKS CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	Suppose You Don't Have the Present Educational Qualification, Will Your Employer Employ You ?									
	He Will Employ Me.		He Won't Employ Me.		No Idea		Yes, But Lower Salary		Yes, Without Any More Training	
	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent
Agriculture	5	23.81	12	57.14	4	19.05	-	-	-	-
Commerce	29	33.33	47	54.02	10	11.49	1	1.15	-	-
Manufacturing & Industry	22	33.85	36	55.38	7	10.77	-	-	-	-
Home Economics	13	34.21	21	55.26	4	10.53	-	-	-	-
Arts	7	43.75	8	50.00	1	6.25	-	-	-	-
Total	76	33.48	124	54.63	26	11.45	1	0.44	-	-

TABLE 15.1 (Continued)

Track of Study	Could You Perform The Assigned Task, If You Have No Formal Vocational Training ? (13)						With Academic Traing Together with On-The-Job Training Could You Perform the Assigned Task ? (14)			
	Yes, Without Any More Training		Yes, With On-The-Job Training		No.		Yes		No.	
	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent
Agriculture	6	28.57	11	52.38	4	19.05	15	71.43	6	28.57
Commerce	17	19.54	57	65.52	13	14.94	73	83.91	14	16.09
Manufacturing & Industry	11	16.92	38	58.46	16	24.62	53	80.30	13	19.70
Home Economics	12	31.59	20	52.63	6	15.79	33	86.84	5	13.16
Arts	3	18.75	8	50.00	5	31.25	9	56.25	7	43.75
Total	49	21.59	134	59.03	44	19.38	183	80.26	45	19.74

TABLE 15.2

OPINIONS OF DTE GRADUATES RELATING TO THEIR TRAINING AND THE NATURE OF THEIR WORKS CLASSIFIED BY TRACK OF STUDY(1975)

Track of Study	Suppose You Don't Have the Present Educational Qualification, Will Your Employer Employ You ? (12)									
	He Will Employ Me		He Won't Employ Me		No Idea		Yes, But Lower Salary		Yes, If With Experience	
	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent
Agriculture	3	21.43	11	78.57	-	-	-	-	-	-
Commerce	13	30.95	23	54.76	5	11.90	-	-	1	2.38
Manufacturing & Industry	10	28.57	22	62.86	3	8.57	-	-	-	-
Home Economics	4	33.33	7	58.33	1	8.33	-	-	-	-
Arts	7	38.89	10	55.56	1	5.55	-	-	-	-
Total	37	30.58	73	60.33	10	8.26	-	-	1	0.83

TABLE 15.2 (Continued)

Track of Study	Could You Perform the Assigned Task. If You Have No Formal Vocational Training ? (12)						With Academic Training Together with On-the-Job Training, Could You Perform the Assign Task? (14)			
	Yes, Without Any More Training		Yes With On-the-Job Training		No.		Yes		No.	
	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent	Absolute Number	Percent
Agriculture	5	35.71	7	50.00	2	14.29	11	78.57	3	21.43
Commerce	1	2.38	30	71.43	11	26.19	34	80.95	8	19.05
Manufacturing & Industry	2	5.71	14	40.00	19	54.29	20	57.14	15	42.86
Home Economics	3	25.00	8	66.67	1	8.33	12	100.00	-	00.00
Arts	1	5.56	9	50.00	8	44.44	8	44.44	10	55.56
Total	12	9.92	68	56.20	41	33.88	85	70.25	36	29.75

TABLE 16.1

WAITING PERIOD FOR THE FIRST JOB OF M.S.3 GRADUATES CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year *	Total
	0 - 6 months	3 - 6 months	7 - 12 months	Total		
1966 - 1975	36	27	19	82	48	130
1956 - 1965	16	9	13	38	39	77
1946 - 1955	10	2	10	22	23	45
1936 - 1945	10	6	8	24	14	38
1926 - 1935	3	-	1	4	3	7
Total	75	44	51	170	127	297

*Thirty six of them had waited for the period over 3 years before being employed in the first job. The maximum waiting period is 16 years.

TABLE 16.2

WAITHING PERIOD FOR THE FIRST JOB OF M.S.3 MALE GRADUATES CLASSIFIED BY PERIOD OF GRADUATION(1975)

Period of Graduation	With in One Year				Over One Year*	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	22	19	13	54	28	82
1956-1965	12	3	12	27	23	50
1946-1955	6	2	6	14	16	30
1936-1945	9	4	8	21	9	30
1926-1935	2	-	1	3	3	6
Total	51	28	40	119	79	198

* 19 of them had waited for the period over 3 year before being employed in the first job. The maximum waiting period is 13 years and 4 months.

TABLE 16.3

WAITING PERIOD FOR THE FIRST JOB OF M.S.3 FEMALE GRADUATES CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One* Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	14	8	6	28	20	48
1956-1965	4	6	1	11	16	27
1946-1955	4	-	4	8	7	15
1936-1945	1	2	-	3	5	8
1926-1935	1	-	-	1	-	1
Total	24	16	11	51	48	99

*Seventeen of them had waited for the period over 3 years before being employed in the first job. The maximum waiting period is 16 years.

TABLE 16.4

AVERAGE WAITING PERIOD FOR THE FIRST JOB OF M.S.3 GRADUATES CLASSIFIED BY PERIOD OF GRADUATION AND SEX (1975)

Period of Graduation	* Within One Year Average (months)			**Overall Average (months)		
	Total	Male	Female	Total	Male	Female
1966-1975	4.1	4.3	3.8	11.5	11.0	12.2
1956-1965	4.7	5.2	3.7	14.5	13.8	15.7
1946-1955	5.2	5.1	5.3	14.8	15.2	14.0
1936-1945	4.7	4.9	3.0	11.8	10.6	16.1
1926-1935	3.1	3.8	1.0	12.1	13.9	1.0
Total	4.6	4.7	3.9	12.9	12.4	13.7

* The average is only for those who waited for the period within one year

**The average figure of two years is assigned to those who waited for the period longer then one year. Those who had waited for the first job longer than 3 years, are also assigned two year as the average waiting period.

TABLE 16.5

WAITING PERIOD FOR THE FIRST JOB OF M.S.6 GRADUATES CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One* Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	56	31	16	103	35	138
1956-1965	22	7	11	40	17	57
1946-1955	10	2	6	18	3	21
1936-1945	9	1	1	11	6	17
1926-1935	-	-	-	-	-	-
Total	97	41	34	172	61	233

* Ten of them had waited for the period over 3 years before being employed in the first job. The maximum waiting period is 7 years.

TABLE 16.6

WAITING PERIOD FOR THE FIRST JOB OF M.S. 6 GRADUATES IN AGRICULTURE CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	3	3	2	8	6	14
1956-1965	-	-	-	-	3	3
1946-1955	-	-	1	1	-	1
1936-1945	2	-	1	3	1	4
1926-1935	-	-	-	-	-	-
Total	5	3	4	12	9	22

TABLE 16.7

WAITING PERIOD FOR THE FIRST JOB OF M.S.6 GRADUATES IN COMMERCE CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Tptal
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	32	12	3	47	13	60
1956-1965	8	1	4	13	4	17
1946-1955	1	-	3	4	2	6
1936-1945	3	1	-	4	3	7
1926-1935	-	-	-	-	-	-
Total	44	14	10	68	22	90

TABLE 16.8

WAITING PERIOD FOR THE FIRST JOB OF M.S.6 GRADUATES IN MANUFACTURING AND INDUSTRY CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966-1975	13	13	3	29	7	36
1956-1965	6	3	-	9	7	16
1946-1955	8	1	1	10	-	10
1936-1945	3	-	-	3	1	4
1926-1935	-	-	-	-	-	-
Total	30	17	4	51	15	66

TABLE 16.9

WAITING PERIOD FOR THE FIRST JOB OF M.S 6 GRADUATES IN HOME ECONOMICS

CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One year	Total
	0-2 months	3-6 months	7-12months	Total		
1966 - 1975	5	3	5	13	8	21
1956 - 1965	4	2	5	11	3	14
1946 - 1955	1	-	-	1	1	2
1936 - 1945	1	-	-	1	-	1
1926 - 1935	-	-	-	-	-	-
Total	11	5	10	26	12	38

TABLE 16.10

WAITING PERIOD FOR THE FIRST JOB OF M.S 6 GRADUATES IN ARTS

CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0-2 months	3-6 months	7-12 months	Total		
1966 - 1975	3	-	3	6	1	7
1956 - 1965	4	1	2	7	-	7
1946 - 1955	-	1	1	2	-	2
1936 - 1945	-	-	-	-	1	1
1926 - 1935	-	-	-	-	-	-
Total	7	2	6	15	2	17

TABLE 16.11

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES

CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One year	Total
	0-2 months	3-6 months	7-12 months	Total		
1966 - 1975	45	13	9	67	16	83
1956 - 1965	31	6	4	41	6	47
1946 - 1955	4	-	-	4	1	5
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	80	19	13	112	23	135

* No one had been waited for the period over than 3 years before being employed for the just job

TABLE 16.12

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES IN AGRICULTURE

CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year			Total	Over One Year	Total
	0-2 months	3-6 months	7-12 months			
1966 - 1975	6	1	2	9	2	11
1956 - 1965	2	-	1	3	1	4
1946 - 1955	-	-	-	-	-	-
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	8	1	3	12	3	15

TABLE 16.13

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES IN COMMERCE

CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of graduation	With in One Year				Over One Year	Total
	0-2 months	3-6 months	7-12 months	Total		
1966 - 1975	17	6	-	23	5	28
1956 - 1965	14	1	-	15	1	16
1946 - 1955	2	-	-	2	-	2
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	33	7	-	40	6	46

TABLE 16.14

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES IN MANUFACTURING AND INDUSTRY CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0-2 months	3-6 months	7-12 months	Total		
1966 - 1975	9	4	5	18	4	22
1956 - 1965	9	3	-	12	2	14
1946 - 1955	2	-	-	2	-	2
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	20	7	5	32	6	38

TABLE 16.15

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES IN HOME ECONOMICS CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966 - 1975	2	-	1	3	3	6
1956 - 1965	3	2	1	6	1	7
1946 - 1955	-	-	-	-	-	-
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	5	2	2	9	4	13

TABLE 16.16

WAITING PERIOD FOR THE FIRST JOB OF DTE GRADUATES IN ARTS CLASSIFIED BY PERIOD OF GRADUATION (1975)

Period of Graduation	With in One Year				Over One Year	Total
	0 - 2 months	3 - 6 months	7 - 12 months	Total		
1966 - 1975	11	2	1	14	2	16
1956 - 1965	3	-	2	5	1	6
1946 - 1955	-	-	-	-	1	1
1936 - 1945	-	-	-	-	-	-
1926 - 1935	-	-	-	-	-	-
Total	14	2	3	19	4	23

TABLE 16.17

AVERAGE WAITING PERIOD FOR THE FIRST JOB OF GRADUATES CLASSIFIED BY PERIOD OF GRADUATION AND LEVEL OF EDUCATION (1979)

Period of Graduation	*Within One Year Average (months)			**Overall Average (months)		
	M.S.3	M.S.6	DTE	M.S.3	M.S.6	DTE
1966 - 1975	4.1	3.4	2.8	11.5	8.6	6.9
1956 - 1965	4.7	4.0	2.3	14.5	9.9	5.1
1946 - 1955	5.2	4.2	1.0	14.8	7.0	6.0
1936 - 1945	4.7	2.1	-	11.8	9.8	-
1926 --1935	3.1	-	-	12.1	-	-
Total	4.6	3.5	2.5	12.9	8.8	6.2

*The average is only for those who waited for the period within one year.

**The average figure of two years is assigned to those who waited for the period longer than one year. Those who had waited for the first job longer than 3 years are also assigned two year as the average waiting period.

TABLE 16,18

AVERAGE WAITING PERIOD FOR THE FIRST JOB OF VOCATIONAL & TECHNICAL GRADUATES CLASSIFIED BY TRACK OF STUDY AND LEVEL OF EDUCATION

Track of Study	*Within One Year Average (months)		**Overall Average (months)	
	M.S.6	DTE	M.S.6	DTE
Agriculture	4.7	3.4	12.4	7.5
Commerce	3.0	1.6	8.1	4.5
Manufacturing & Industry	2.8	3.1	7.6	6.4
Home Economics	10.7	3.6	11.0	9.8
Arts	4.9	2.7	5.7	6.4

*The Average is only for those who waited for the period within one year

**The average figure of two years is assigned to those who waited for the period longer than one year. Those who had waited for the first job longer than 3 years are also assigned two years as the average waiting period.

TABLE 17.1

RELATIONSHIP BETWEEN WAITING PERIOD FOR THE FIRST JOB AND NUMBER OF TURN-OVER OF M.S. 3 GRADUATES (1975)

Waiting Period (months)	No. of Turn-Over								Total
	0	1	2	3	4	5	6	Over 6	
0 - 2	6	12	15	13	8	5	1	15	75
3 - 6	14	4	8	5	1	6	1	5	44
Over 6	98	15	15	17	3	2	2	26	178
Total	118	31	38	35	12	13	4	46	297

TABLE 17.2

RELATIONSHIP BETWEEN WAITING PERIOD FOR THE FIRST JOB AND NUMBER OF TURN - OVER OF M.S.6 GRADUATES (1975)

Waiting Period (months)	No. of Turn - Over							
	0	1	2	3	4	5	Over 6	Total
0 - 2	37	26	24	5	2	3	-	97
3 - 6	23	12	5	1	-	-	-	41
Over 6	54	28	5	4	1	1	2	95
Total	114	66	34	10	3	4	2	233

TABLE 17.3

RELATIONSHIP BETWEEN WAITING PERIOD FOR THE FIRST JOB AND NUMBER OF TURN - OVER OF DTE GRADUATES (1975)

Waiting Period (months)	No. of Turn - Over							
	0	1	2	3	4	5	Over 5	Total
0 - 2	35	22	12	8	2	-	1	80
3 - 6	7	7	5	-	-	-	-	19
Over 6	21	10	3	1	-	-	1	36
Total	63	39	20	9	2	-	2	135

TABLE 17.4

RELATIONSHIP BETWEEN THE AVERAGE WAITING PERIOD FOR THE FIRST JOB AND AVERAGE RATE OF TURN-OVER CLASSIFIED BY LEVEL OF EDUCATION OF EMPLOYEES

Waiting Period (months)	M.S.3	M.S.6	DTE
0 - 2	3.5	1.2	1.1
3 - 6	2.6	0.6	0.9
Over 6	1.9	0.8	0.7
Overall Average	2.4	0.9	0.9

Note that the average number of turn-over of 8 is used for that over-6 times and the average number of 7 is used for that of over-5 times.

TABLE 17.5

NUMBER OF JOB TURN - OVER OF M.S.6 GRADUATES
CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	No. of Turn - Over							
	0	1	2	3	4	5	Over 5	Total
Agriculture	12	5	2	-	1	1	-	21
Commerce	51	24	7	4	1	2	2	91
Manufacturing & Industry	28	23	9	7	1	1	-	69
Home Economics	23	11	5	-	-	1	-	40
Arts	5	7	4	1	-	1	-	18
Total	119	70	27	12	3	6	2	239

TABLE 17.6

NUMBER OF JOB TURN OVER OF DTE GRADUATES
CLASSIFIED BY TRACK OF STUDY (1975)

Track of Study	No. of Turn - Over					Over 5	Total
	0	1	2	3	4		
Agriculture	10	2	3	-	-	-	15
Commerce	16	14	12	4	-	1	47
Manufacturing & Industry	16	11	5	3	2	-	38
Home Economics	8	5	-	-	-	-	13
Arts	13	7	1	2	-	-	23
Total	63	39	21	9	2	1	136

TABLE 17.7

AVERAGE RATE OF TURN OVER OF VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY LEVEL OF EDUCATION AND TRACK OF STUDY (1975)

Level of Education	Track of Study				
	Agriculture	Commerce	Manufacturing & Industry	Home Economics	Arts
M.S.6	0.9	0.9	1.0	0.7	1.3
DTE	0.9	1.2	1.1	0.4	0.7

Note that the average number of turn-over of 7 is used for that of over - 5 times.

TABLE 18.1

AVERAGE RATE OF TURN-OVER OF GRADUATES, BY LEVEL OF EDUCATION SEX, FIRM SIZE OF FIRST EMPLOYMENT CLASSIFIED BY YEARS OF WORK EXPERIENCE (1975)

Years of Work Experience	Level of Education			Sex		Firm Size of First Employment		
	M.S.3	M.S.6	DTE	Male	Female	Small	Medium	Large
Less than 1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
1 - 5	0.5	0.5	0.6	0.6	0.3	0.6	0.2	0.6
6 - 15	1.0	1.0	1.2	1.2	0.9	0.9	1.1	1.2
16 - 30	1.8	1.6	1.4	1.9	1.1	1.4	2.0	1.7
Over - 30	3.1	2.1	-	2.8	1.1	2.3	3.8	6.4
Total	2.4	0.9	0.9	1.2	0.6	0.8	1.0	1.2

TABLE 18.2

AVERAGE RATE OF TURN-OVER OF M.S.6 GRADUATES CLASSIFIED BY TRACK OF STUDY AND YEARS OF WORK EXPERIENCE

Years of Work Experience	Track of Study				
	Agriculture	Commerce	Manufacturing & Industry	Home Economics	Arts
Less than 1	0.0	0.0	0.2	0.0	-
1 - 5	0.2	0.6	0.7	0.3	0.3
6 - 15	1.3	0.9	1.1	0.9	1.5
16 - 30	0.0	1.6	1.7	1.4	2.5
Over 30	3.3	2.8	1.2	1.0	1.0

TABLE 18.3

AVERAGE RATE OF TURN-OVER OF DTE GRADUATES CLASSIFIED BY TRACK OF STUDY AND YEARS OF WORK EXPERIENCE

Years of Work Experience	Tracks of Study				
	Agriculture	Commerce	Manufacturing & Industry	Home Economics	Arts
Less than 1	-	0.0	0.0	0.0	-
1 - 5	0.0	0.8	0.8	0.0	0.4
6 - 15	1.6	1.4	1.5	0.5	1.0
16 - 30	1.6	1.8	1.6	0.3	0.0
Over 30	-	-	-	-	-

TABLE 19.1

NUMBER OF AVERAGE MONTHS OF UNEMPLOYMENT PER EACH YEAR OF EMPLOYMENT, OF M.S.3 GRADUATES CLASSIFIED BY SEX AND M.S. 6 AND DTE GRADUATES ALL CLASSIFIED BY NUMBER OF JOB TURN - OVER (1975)

Number of Job Turn-Over	M.S.3 Graduates			M.S.6 Graduates	DTE Graduates
	Male	Female	Total		
0	2.2	3.8	2.2	2.1	1.1
1	1.7	4.3	2.6	1.7	1.4
2	1.7	1.8	1.7	0.5	0.5
3	2.0	4.9	3.0	0.7	0.3
4	0.8	4 57	1.9	0.5	1.0
5	0.9	0.5	0.8	0.6	2.0
6	0.7	-	0.7	0.5	-
Over 6	0.5	0.2	0.5	1.2	4.6
Overall Average	1.7	3.4	2.2	1.4	1.1

TABLE 19.2

NUMBER OF AVERAGE MONTHS OF UNEMPLOYMENT PER EACH YEAR OF EMPLOYMENT, OF M.S. 6 AND DTE GRADUATES CLASSIFIED BY TRACK OF STUDY (1975)

Level of Education	Track of Study				
	Agriculture	Commerce	Manufacturing & Industry	Home Economics	Arts
M.S.6	1.4	1.9	0.7	2.7	0.7
DTE	1.3	1.1	0.8	2.1	0.7

TABLE 20.1

NUMBER OF VACANT POSITIONS AND NUMBER OF APPICATIONS IN 1974 CLASSIFIED BY FIRM SIZE AND TRACK OF STUDY (1975)

Track of Study \ Firm Size	Small		Medium		Large		Total	
	No. of Vacant Positions	No. of Applications	No. of Vacant Positions	No. of Applications	No. of Vacant Positions	No. of Applications	No. of Vacant Positions	No. of Applications
Agriculture	2	18	1	4	19	39	22	61
Commerce	26	155	27	191	7	49	60	395
Manufacturing & Industry	6	36	5	26	17	78	28	140
Home Economics	-	-	-	-	-	-	-	-
Arts	-	-	-	-	-	-	-	-
Total	34	209	33	221	43	166	110	596

TABLE 20.2

RATIO OF A VACANT POSITIONS PER APPLICATIONS IN 1974
CLASSIFIED BY FIRM SEZE AND TRACK OF STUDY (1975)

Firm Size / Track of Study	Small	Medium	Large	Average
Agriculture	1:9	1:4	1:2	1:3
Commerce	1:6	1:7	1:7	1:7
Manufacturing & Industry	1:6	1:5	1:5	1:5
Home Economics	-	-	-	-
Arts	-	-	-	-
Average	1:6	1:7	1:4	1:5

TABLE 21.1

METHODS AND CRITERIA OF EMPLOYERS IN RECRUITING EMPLOYEES

CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY, AND FIRM SIZE(1975)

Classification		Methods in Recruiting Employees(7)							Critena for Recruiting Employees (10)					
		Through Personal Recommen-dation	Through Educational Institution	Through Advertise-ments	Through Employment Office	Through Personal Inquiries of Employees	Supplied by Head Office	Through Transference of Ownship	Academic Quali-fication	Work Experience	Credits of Referees	Persona-lities and Wit	Sex	Age.
Nature of Firm Ownership	Domestic	327	81	179	45	69	29	2	673	689	487	518	319	232
	Foreign	19	16	20	6	0	3	5	55	58	32	38	26	22
Industry	Primary	4	0	3	0	0	2	0	6	8	8	5	5	4
	Secondary	150	36	89	31	49	8	7	315	369	251	255	169	133
	Tertiary	192	61	107	20	20	22	0	407	370	260	296	170	117
Firm Size	Less than 50 Employees	197	43	92	24	34	24	0	379	378	291	273	186	126
	More than 50 but Less than 200 Employees	115	29	65	16	31	8	4	250	267	170	198	111	85
	Over 200 Employees	34	25	42	11	4	0	3	99	102	58	85	48	43
Total		346	97	199	51	69	32	7	728	747	519	556	345	254

TABLE 21.2

PERCENTAGE DISTRIBUTIONS OF METHODS AND CRITERIA OF EMPLOYERS IN RECRUITING EMPLOYEES CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY AND FIRM SIZE (1975)

Classification		Methods in Recruiting Employees (7)							Critena for Recruiting Employees (10)					
		Through Personal Recommendation	Through Educational Institution	Through Advertisements	Through Employment Office	Through Personal Inquiries of Employees	Supplied by Head Office	Through Transference of Ownership	Academic Qualification	Work Experience	Credits of Referees	Personalities and Wit	Sex	Age
Nature of Firm Ownership	Domestic	44.67	11.07	24.45	6.15	9.43	3.96	0.27	23.06	23.92	16.69	17.75	10.92	7.
	Foreign	28.79	24.24	30.30	9.09	-	4.54	7.58	23.81	25.11	13.85	16.45	11.26	9.
Industry	Primary	44.44	-	33.33	-	-	22.22	-	16.67	22.22	22.22	13.89	13.89	11.
	Secondary	40.54	9.73	24.05	8.38	13.23	2.16	1.89	21.11	24.73	16.82	17.09	11.32	8.
	Tertiary	43.44	13.80	24.21	4.52	4.52	4.98	-	25.12	22.84	16.05	18.27	10.49	7.
Firm Size	Less than 50 Employees	47.58	10.39	22.22	5.80	3.21	5.80	- -	23.21	23.15	17.32	16.72	11.39	7.
	More than 50 but Less than 200 Employees	42.91	10.82	24.25	5.97	11.57	2.99	1.49	23.13	24.70	15.73	18.32	10.27	7
	Over 200 Employees	28.57	21.00	35.29	9.24	3.36	-	2.25	22.76	23.45	13.33	19.54	11.03	9
Total		43.19	12.11	24.84	6.37	8.61	4.00	0.87	23.12	23.72	16.48	17.66	10.96	8.

TABLE 21.3

ABILITIES IN APPLYING THEIR TRAINING KNOWLEDGE OF VOCATIONAL AND TECHNICAL GRADUATES FROM EMPLOYERS' POINT OF VIEW.CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY AND FIRM SIZE (1975)

Classification		Average Work Ability of Vocational Graduates (11)				Ability in Applying Knowledes of Vocational Graduates (13)			
		Very Good	Good	Average	Unsatisfactory	Very Good	Only Knows Theories without Much Ability to Apply	Not Knowing Enough in Both Theories and Practice	The Knowledge Is Not Direclty Applicable to the Work
Nature of Firm Ownership	Domestic	14	97	44	-	80	57	3	7
	Foreign	-	7	5	1	6	4	1	1
Industry	Primary	2	-	-	-	2	-	-	-
	Secondary	7	48	20	1	34	33	1	3
	Tertiary	5	56	29	-	50	28	3	5
Firm Size	Less than 50 Employees	11	53	26	-	51	29	2	6
	More than 50 but Less than 200 Employees	2	38	16	-	23	24	1	2
	Over 200 Employees	1	13	7	1	12	8	1	-
Total		14	104	49	1	86	61	4	8

TABLE 21.4

PERCENTAGE DISTRIBUTIONS OF ABILITIES IN APPLYING TRAINING KNOWLEDGE OF VOCATIONAL AND TECHNICAL GRADUATES FROM EMPLOYERS' POINT OF VIEW CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY AND FIRM SIZE (1975)

Classification		Average Work Ability of Vocational Graduates (11)				Ability in Applying Knowledge of Vocational Graduates (13)			
		Very Good	Good	Average	Unsatisfactory	Very Good	Only Knows Theories Without Much Ability to Apply	Not Knowing Enough in Both Theories Practice	The Knowledge IS Not Direclty Applicable to the Work
Nature of Firm Ownership	Domestic	9.03	62.58	28.39	-	54.42	38.78	2.04	4.76
	Foreign	-	53.85	38.46	7.69	50.00	33.33	8.33	8.33
Industry	Primary	100.00	-	-	-	100.00	-	-	-
	Secondary	9.21	63.16	26.32	1.32	47.89	46.48	1.41	4.26
	Tertiary	5.56	62.22	32.22	-	58.13	32.56	3.49	5.81
Firm Size	Less than 50 Employees	12.22	58.89	28.89	-	57.95	32.95	2.27	6.82
	Less than 200 Employees	3.57	67.86	28.57	-	46.00	48.00	2.00	4.00
	Over 200 Employees	4.55	59.09	31.82	4.55	57.14	38.10	4.76	-
Total		8.33	61.90	29.17	0.60	54.09	38.36	2.52	5.03

TABLE 21.5

EMPLOYERS OPINIONS ON ABILITIES OF GRADUATES OF DIFFERENT EDUCATIONAL LEVELS CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY, AND FIRM SIZE (1975)

Classification		Do You Think It Would be Profitable to Your Business To Hire M.S.3 Graduates And Gase Them On-The-Job Training At the Going Wage Rate in Comparison With M.S.6 and DTE Graduates ? (16)				
		Profitable	Indifference	Not Profitable	No Idea	Level of Education Is Not As Important As work Experience
Nature of Firm Ownership	Domestic	38	34	60	2	14
	Foreign	2	5	4	-	1
Industry	Primary	-	-	2	-	-
	Secondary	20	16	23	2	7
	Tertiary	20	23	39	-	8
Firm Size	Less than 50 Employees	21	23	34	-	7
	Less than 200 Employees	14	11	19	2	7
	Over 200 Employees	5	5	11	-	1
Total		40	39	64	2	15

TABLE 2145 (Continued)

Classification		Whether Graduates in the Same Track but Different Educational Level Perform Differently ? (15)									
		M.S. 3 and M.S. 6					M.S. 6 and DTE				
		No Difference	Little Difference	Great Difference	No Idea	Depending on Experience and Intention to Work	No Difference	Little Difference	Great Difference	No Idea	Depending on Experience and Intention to Work
Nature of Firm Ownership	Domestic	14	73	46	7	8	10	68	55	9	4
	Foreign	1	8	3	-	1	1	5	7	-	-
Industry	Primary	-	-	1	-	1	-	-	1	-	1
	Secondary	9	38	21	3	3	6	34	29	4	2
	Tertiary	7	43	27	4	5	5	39	32	9	1
Firm Size	Less than 50 Employees	5	41	30	3	7	7	35	37	5	4
	Less than 200 Employees	9	26	12	4	2	2	28	13	4	-
	Over 200 Employees	1	14	7	-	-	-	10	12	-	-
Total		15	81	49	7	9	11	73	62	9	4

TABLE 21.6

PERCENTAGE DISTRIBUTIONS OF EMPLOYERS' OPINIONS ON ABILITIES OF GRADUATES OF DIFFERENT EDUCATIONAL LEVELS CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY, AND FIRM SIZE (1975)

Classification		Do You Think It Would be Profitable to Your Business To Hire M.S.3 Graduates And Gase Them On-The-Job Training At the Going Wage Rate in Comparison With the Employment of M.S.6 and DTE Graduates? (16)				
		Profitable	Indifference	Not Profitable	No Idea	Level of Education Is Not As Important As work Experience
Nature of Firm Ownership	Domestic	25.68	22.97	40.54	1.35	9.46
	Foreign	16.67	41.67	33.33	-	8.33
Industry	Primary	-	-	100.00	-	-
	Secondary	29.41	23.53	33.82	2.94	10.96
	Tertiary	22.22	25.56	43.33	-	8.89
Firm Size	Less than 50 Employees	24.71	27.06	40.00	-	8.24
	Less than 200 Employees	26.42	20.75	35.85	3.77	13.21
	Over 200 Employees	22.73	22.73	50.00	-	4.55
Total		25.00	24.38	40.00	1.25	9.38

TABLE 21.6 (Continued)

Classification		Whether Graduates in the Same Track but Different Educational Level Perform Differently ? (15)									
		M.S. 3 and M.S. 6					M.S.6 and DTE				
		No Difference	Little Difference	Great Difference	No Idea	Depending on Experience and Intention to Work	No Difference	Little Difference	Great Difference	No Idea	Depending on Experience and Intention to Work
Nature of Firm Ownership	Domestic	9.46	49.32	31.08	4.73	5.41	6.85	46.58	37.67	6.16	2.74
	Foreign	7.69	61.54	23.28	-	7.69	7.69	38.46	53.85	-	-
Industry	Primary	-	-	50.00	-	50.00	-	-	50.00	-	50.00
	Secondary	10.96	52.05	28.77	4.11	4.11	8.00	45.33	38.67	5.33	2.67
	Tertiary	8.14	50.00	31.40	4.65	5.81	5.81	45.35	37.21	10.47	1.16
Firm Size	Less than 50 Employees	5.81	47.67	34.88	3.49	3.14	3.57	41.67	45.24	5.95	4.76
	Less than 200 Employees	16.98	49.06	22.64	7.55	3.77	15.09	52.83	24.53	7.55	-
	Over 200 Employees	4.55	63.64	31.82	-	-	-	45.45	54.55	-	-
Total		9.32	50.31	30.43	4.35	5.59	6.92	45.91	38.99	5.66	2.52

TABLE 21.7

GENERAL INFORMATION ABOUT THE SELECTION OF EMPLOYEES, COMMENTS ON CURRICULUM AND TRAINING PROGRAMMES OF EMPLOYERS CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY, AND FIRM SIZE (1975)

Classification		Do You Have Any Problems in Secting Qualified Applicants? (9)		Do You Consider the Present Curriculum of Vocational Education Well Serving the Need of Private Sector? (18)		Does Your Firm Have A Training Section (20)	
		Yes	No.	Yes	No.	Yes	No.
Nature of Firm Ownership	Domestic	49	105	123	31	60	95
	Foreign	4	9	10	3	5	8
Industry	Primary	-	2	2	1	1	1
	Secondary	23	56	55	23	28	45
	Tertiary	30	56	76	10	36	57
Firm Size	Less than 50 Employees	27	63	74	16	34	56
	Less than 200 Employees	20	35	40	15	19	37
	Over 200 Employees	6	16	19	3	12	10
Total		53	114	133	34	65	103

TABLE 21.8

PERCENTAGE DISTRIBUTIONS OF GENERAL INFORMATION ABOUT THE SELECTION OF EMPLOYEES, COMMENTS ON CURRICULUM AND TRAINING PROGRAMMES OF EMPLOYERS CLASSIFIED BY FIRM OWNERSHIP, INDUSTRY AND FIRM SIZE (1975)

Classification		Do You Have Any Problems in Selecting Qualified Applicants ? (9)		Do You Consider the Present Curriculum of Vocational Education Well Serving the Need of Private Sector ?		Does Your Firm Have A Training Section (20)	
		Yes	No.	Yes	No.	Yes	No.
Nature of Firm Ownership	Domestic	31.82	68.18	79.87	20.13	38.71	61.29
	Foreign	30.77	69.23	76.92	23.08	38.46	61.54
Industry	Primary	-	100.00	66.67	33.33	50.00	50.00
	Secondary	29.11	70.89	70.51	29.49	38.36	61.64
	Tertiary	34.88	65.12	88.37	11.63	38.71	61.29
Firm Size	Less than 50 Employees	30.00	70.00	82.22	17.78	37.78	62.22
	Less than 200 Employees	36.36	63.64	72.73	27.27	33.93	66.07
	Over 200 Employees	27.27	72.73	86.36	13.64	54.55	45.45
Total		31.74	68.26	79.64	20.36	38.69	61.31

TABLE 22.1

EMPLOYMENT STRUCTURE OF FIRMS THAT EMPLOY VOCATIONAL AND TECHNICAL

GRADUATES CLASSIFIED BY INDUSTRY AND FIRM SIZE (1975)

Classification		Total Employees				Technical and Vocational Trained Employees																	
						Level of Education				Sex		Trade of Study					Position						
		Total	Primary Education and Lower	Secondary Education	Higher Education	Total	M.S.3	M.S.6	DTE	Male	Female	Agri.	Comm.	Man. &In.	Home Ec.	Arts	Chief Supervisor	Asst. Supervisor	Shop-Steward	Clerks	Executive	Others
Industry	Primary	238	52	154	32	53	-	35	18	46	7	36	9	6	2	-	-	5	39	9	-	-
	Secondary	16,788	11,974	3,907	907	1,629	301	1,047	281	1,155	474	13	597	986	25	8	128	253	376	533	47	401
	Tertiary	11,028	2,594	5,653	2,781	1,950	51	1,157	742	1,267	683	30	1,533	365	7	15	69	12	35	1,277	202	246
Firm Size	Small	1,279	550	530	199	303	42	201	60	178	125	4	220	77	2	0	18	27	22	182	26	28
	Medium	5,439	3,329	1,633	477	591	77	344	170	412	179	29	373	175	9	5	31	93	41	376	32	18
	Large	21,336	10,741	7,551	3,044	2,738	233	1,694	811	1,878	860	46	1,546	1,105	23	18	148	150	387	1,261	191	601
Total		28,054	14,620	9,714	3,720	3,632	352	2,239	1,041	2,468	1,164	79	2,139	1,357	34	23	197	270	450	1,819	249	647

TABLE 22.2

PERCENTAGE DISTRIBUTIONS OF EMPLOYMEN STRUCTURE OF FIRMS THAT EMPLOY VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY INDUSTRY AND FIRM SIZE (1975)

Classification		Total Employees	Technical and Vocational Trained Employees																			
						Level of Education				Sex		Track of Study					Position					
		Total	Primary Education and Lower	Secondary Education	Higher Education	Total	M.S.3	M.S.6	DTE	Male	Female	Agri.	Comm.	Man& In.	Home Ec.	Arts	Chief Supervisor	Asst. Supervisor	Shop Steward	Clerks	Executive	Others
Industry	Primary	100.0	21.85	64.71	13.44	100.0	0.00	66.04	33.96	86.79	13.21	67.92	16.98	11.33	3.77	0.00	0.00	9.43	73.59	16.58	0.00	0.00
	Secondary	100.0	71.33	23.27	5.40	100.0	18.48	64.27	17.25	70.90	29.10	0.80	36.65	60.53	1.53	0.49	7.86	8.84	23.08	32.72	2.89	24.61
	Tertiary	100.0	23.52	51.26	25.22	100.0	2.62	59.33	38.05	64.98	35.02	1.54	78.62	18.72	0.36	0.76	3.54	6.21	1.79	65.49	10.36	12.61
Firm Size	Small	100.0	43.00	41.44	15.56	100.0	13.86	66.34	19.80	58.75	41.25	1.32	72.61	25.41	0.66	0.00	5.94	8.91	7.26	60.07	8.58	9.24
	Medium	100.0	61.21	30.02	8.77	100.0	13.03	58.21	28.76	69.71	30.29	4.91	63.11	29.61	1.52	0.85	5.25	15.74	6.94	60.91	5.41	3.05
	Large	100.0	50.34	35.39	14.27	100.0	8.51	61.87	29.62	68.59	31.41	1.68	56.46	40.35	0.84	0.66	5.41	5.48	14.13	46.06	6.98	21.95
Total		100.0	52.11	34.63	13.26	100.0	9.69	61.65	28.66	67.95	32.05	2.18	58.89	37.36	0.94	0.63	5.42	7.43	12.39	50.08	6.86	17.81

TABLE 22.3

EMPLOYMENT STRUCTURE OF FIRMS THAT DO NOT EMPLOY VOCATIONAL AND TECHNICAL GRADUATES CLASSIFIED BY FIRM SIZE (1975)

Firm Size	Total Employees				Percentage Distribution of Total Employees			
	Total	Primary Education and Lower	Secondary Education	Higher Education	Total	Primary Education and Lower	Secondary Education	Higher Education
Small	1,218	1.019	181	18	100.00	83.66	14.86	1.48
Medium	1,915	1,684	205	26	100.00	87.94	10.70	1.36
Large	338	324	14	-	100.00	95.86	4.14	-
Total	3,471	3,027	400	44	100.00	87.21	15.52	1.27

Reasons for Not Employing Vocational and Technical Graduates

1. Do not need educated workers (29)
2. Vocational and technical graduates Probably know enough theories but lack of experences and skills required by the firm (22)
3. The firm size is so small that Vocational graduates are not needed (18)
4. It will, unnecessarily, increase the costs or Production (15)
5. These vacational graduates normally do not have enough patience for the kind of work assigned tend to be less obedient than those who have less education (15)
6. Have never been approached for jobs by these graduates. (6)

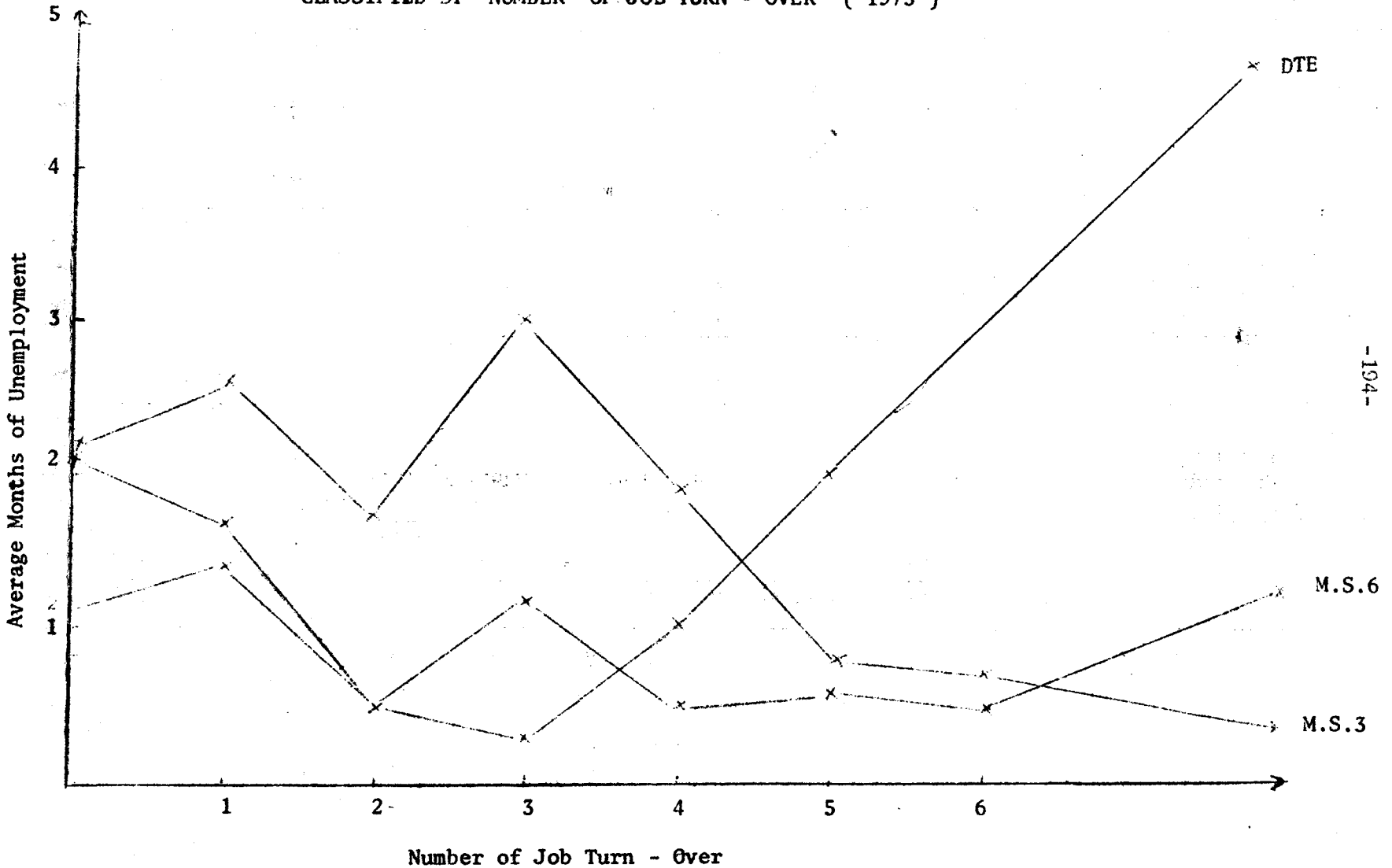
TABLE 22.4

AVERAGE FIRM SIZE CLASSIFIED BY FIRMS THAT EMPLOY VOCATIONAL AND TECHNICAL GRADUATES AND THAT DO NOT DO SO (1975)

Classification		Total Employees				Technical and Vocational Trained Employees																
							Level of Education			Sex		Track of Study					Position					
		Total	Primary Education and Lower	Secondary Education	Higher Education	Total	M.S.3	M.S.6	DTE	Male	Female	Agri.	Comm.	Man&In.	Home Ec.	Arts	Chief Supervisor	Asst. Supervisor	Shop-Steward	Clerks	Executive	Others
Firms that do Not Employ Vocational Graduates	Small	16	13	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Medium	87	77	9	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Large	338	324	14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firms That do Not Employ Vocational Graduates	Small	13	6	5	2	3	0	2	1	2	1	0	2	1	0	0	0	0	0	3	0	0
	Medium	90	55	27	8	10	1	6	3	7	3	1	6	3	0	0	1	1	1	6	1	0
	Large	970	488	347	139	124	11	77	36	35	9	2	70	50	1	1	7	9	16	57	9	26

FIGURE 2

THE DISTRIBUTIONS OF AVERAGE MONTHS OF ON EMPLOYMENT
OF GRADUATES OF DIFFERENT LEVELS OF EDUCATION
CLASSIFIED BY NUMBER OF JOB TURN - OVER (1975)



รายชื่อเอกสารรายงานวิจัย

หน่วยวิจัย คณะเศรษฐศาสตร์

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