

- D V R Q Q D R Q H G \$ (3 \$ F W L S U W Q J H V 6
0 D U F K E \$ S U L O

3 U R M H F W % D F N J U R X Q G

7KH SXUSRVH RI RXU UHVHDUFK DW 7KH 8QLYHUVLW\ RI WK
TXDOLQDDWDL YH R P V\NGXHGQHQW\ V\&ZIORR U H\GSHRQDHWQKSH\QD
VWXGH\QWHZ FROOH\H\QD QLH ,X F\NDDW RDQQ QDVRQHJUF R QODERUDW
GXULQJS WIKQHJ W\&QIPY\WVWW\H RI WKH :HVWHUQ &DSH LQ &DS
VWXG\LQJ KRZ WR SXW OHDUQLQJ HQYLURQPHQW UHVHDUF

7KLV TXDOLWDWGMDFWWWM\WHGDMLRQHQHWWHLWXHQWLRLQRIVWXG
VFLHQFH WHFKQRORJ\ HQJLQHHULQJ DQG PDWKHPDWLFV
8QLYHUVLW\ RI WKH :HVWHUQ & DSH\TV YHUV\URQ VR\IHWKH , QW
(ORQJGDX\HVWLRQQ\H\\$ WHRHJSDSV\\$KIKQU GDWD IURP VWXGHQ
VRSKRPRUHV MXQLRUV RU VHQLRUV WR DQVZHU D FHQWU
HQYLURQPHQWV LPSDFW VWXGHQWV WR PDUWULXXNODDWDHQ\KU
(ORQJSOD\WSRH\UWWWD\IRFXVHV RQ KRZ OHDUQLQJ HQYL
SUDFWLFH IRU DGPLQLVWUDWRUV SURIHVVURV DQG VWXG

6 R F L P W D N J U R X Q G

7KH SUREOH PZK\WWHKG\QDQW DQWDJHG VWXGHQWV LQ & DSH
EDUULHUV LQ DGGLWL RQ WR DFDGHPLF FKDOOHQJHV ZKLF
GHJUHHV 2XU JRDO LV WR ILQG KRIZP \$W\KHWOWK\HGGH\H\SLHUL\H\nQW
WKHLU GHJUHHV \$GGLWL RQD O\ ZH DLP WR PHDVXUH LI F
OH DUQLQJ LQ SRVLWLYH ZD\V &RPPXQDO JRDOV DUH DUWL
SXUSR VH DQG FROOD E\QOB\W\LER QW\W\Q\H\O\N\K\B\Q\PL\Q\W\H\DU\Q\L\Q.
ZRUNLQJ

:H KRSH WR OHDUQ KRZ WKH OLYHGZHKLSTMWU LVHMQXFGHVQRM VGID WDQ
8QLYHUVLW\ RI WKH :HVWHUQ & DSH LPSDFW WKHLU UHWHQ
DQG KPHDPWD WLFV 67(0 SURJUDPV 2XU UHVHDUFK DLPV WR L
DFKLHYH FRPPXQDO JRDOV LQ 67(0 SURJUDPV

3 R V W U H V H D U F K a"ëÂ / & q q u H Q H U D O L] L Q J V W X G H Q W H [S H U L H Q F

H
W K R X J K W I X O L V R X F M X G / R Q W W R I Q Q F D E Q G H 0 B O H F X U U H Q W O \ O R R N I
U H Y L H Z H G M R X U Q D O V W R F R Q V L G H U I R U S X E O L F D W L R Q

1RWDEOH YLVLWV

'U -DVRQ 9DVVHU (ORQJ DQG 'U OHODQLH /XFND\

8SRQ RXU LQLWLDO IDFH WR IDFH PHHWLQJ OHODQLH RUJ
'XULQJ P\ YLVLW WKH FDPSXV ZDV SUHSDULQJ IRU YDFDWL
IUDPH RI WKH YLVLW :H OHODQLH DQG -DVRQ IRXQG WKDW
WKHLU UHJXODU FRXUVH VHVVLRQV 7KH FKDOOHQJH LV WK
GLIIHUhQW WLPH IUDPH DQG FRXUVH VFKHGXOH WKDQ WKH

\$IWHU PHHWLQJ ZLWK D IHZ RI WKH IDFXOW\ LQ WKH HGXFDF
GXULQJ P\ YLVLW , ZDV DEOH WR PHHW ZLWK 'U 6LPSKLZH
/XFND\ LQWURGXFHG PH WR WKH FRRUGLQDWRU RI WKH 5R

'U -DVRQ 9DVVHU (ORQJ DQG 'U 6LPSKLZH 6HVDQWL

ODULNL 9LFWRU 8:& 5REEHQ , VODQG 0D\LEX\H \$UFKLYHV 5H
DQG 'U -DVRQ 9DVVHU (ORQJ DIWHU D GD\ RI H[SORUDWLR

0HHWLQJ ZLWK VWXGHQWV

0HHWLQJ ZLWK DQG VSHQGLQJ WLPH ZLWK VWXGHQWV DW V

)RU ILYH GD\V , GURYH RQ WKH RSSRVLWH VLGH RI WKH UF

WKH RSSRVLWH VLGH RI WKH FDU DQG ZLWK WKH DGYLFH

QDYLJDWHG WR WKH XQLYHUVLW\ LQHQXOFOODMHCQFDS DWLRQ
GLVVHUWDWLQRQ UHVHDUFK ZDV FRQGXFWHG DW WKH OLVVR
& DSH 7RZQ 6RXWK \$IULFD ZDV WKDW WKHLU QHHGV ZHUH
FRQGXFWHG RQ IHPDOH VWXGHQWV DQG DW 8:& VWXGHQWV
\$GGLWLRQDOO\ ZKLOH WKH IHPDOH VWXGHQWV DW OLVVRX
FRQJUXMRQFRHHG LQ WKHLU 67(0 SURJUDPV WKH VDPH FRXO
VWXGHQWV 7KH PDLQ GLIIHUhQFH ZDV ZKLOH WKH LVVXHV

\$ V 67(0 VW@GNHIO WVKH IHPDOH VWXGHQWV DW 0LVVRXUL 67
PLFD@RJUHVVLRQV IURPW@GHOQRVZV67@W WKRVH RKLGVLIHIHUHQW
%OD, QNLJH@R X@LWK UHVSHFW WKHLU L\QVHJHDWD@W@R@G FODVV
WKHP

, Q VXPPDU\ ZKDW , IRXQG LV WKDW DGPLQ LEV@WUDQHW RUV IDP
D@UH RI WKH LVVXHV @R@Q JZH@Q@W@Q@IS@F@W @IUMK VVXGHQW
:KLWH %O, Q@GNLJB@R@R@W@DXUG \ QHHG W@Q@G HE@W@W@Q@G JJOHV WR
VR WKDW D PRUH UREX@W YSHOO@RS HDG@Q@HD@W@R@R@Q@HR@Q

ZYHUDOO , HQMR\HG P\ WLPH LQ &DSH 7RZQ 6YRHUXW K \$IULFD
IUXLW@Q@RI WKHP FRPPHQWHG RQ Wp`0 VW ò•“YDW`@Q@XGHQ a”

\$SSHQGL[\$

, QWHUYLHZ 4XHVWLRQV

3OHDVH VKDUH \RXU JHQGHU \HDU LQ VFKRRO DQG ZKHU

:KDW GHJUHH SURJUDP DUH \RX HQUROOHG LQ"

7HOO XV ~~B6RKRDMIRKQDO~~ EDFNJURXQG

:KDW PRWLYDWHG \RX WR FKRRVH D PDMRU LQ WKH 67(0

+RZ GLG \RXU H[SHULHQFHV DV D KLJK VFKRRO VWXGHQW

PDMRU"

'HVFULEH \RXU KLJK VFKRRO H[SDHFUHPHQFV V \$3HOFBWWVGHWRU

'XDO (QUROOPHQW FRXUVHZRUN

7HOO XV DERXW WKH VWXG\ KDELWV \RX GHYHORSHG DV

+RZ KDYH \RXU VWXG\ KDELWV HYROYHG WR VXLW \RXU Q

:KDW H[WUDFXUULFXODU DFWLYLWLHV GR \RX SDUWLFLSD

+RZ KDYH \RXU H[SHULHQFHV ZLWK H[WUDFXUULFXODU DF

:KDW DUH VRPH FKDOOHQJHV RI SDUWLFLSDWLQJ LQ H[WD

:KDW DUH WKH EHQHILWV RI SDUWLFLSDWLQJ LQ H[WUDF

'R \R\KL\OL]H DUW LQ \RXU VWXG\ KDELWV" L H VWXG\ ZL

GUDZ RU SDLQW WR YLVXDOL]H FRQFHSHV 3OHDVH H[SODL

, Q ZKDW ZD\V GR \RX WKLQN DUW FDQ EH XVHG DV D OH

:KDW KDV \RXU H[SHULHQFH "EHHQ ZLWK ZRUN

+RZ KDV \RXU SDUWWFWLGSD\WPLSRQFW\GZRRU\NU OHDUQLQJ H[S

+RZ KDV \RXU SDUWLFLSDWLQJ LPSDFWHG \RX DV D 67(0