

678 '(17 /,)(& 200, 77 ((

(1 & 285 \$ * , 1 *

6867 \$, 1 \$ % / (% (+ \$ 9 , 25

& + \$ 1 * (6

352 - (& 7 ' (6 & 5 , 37 , 21

7KLV LV DQ LQLWLDWLYH WKDW SURPRWHV EHKDYLRLUDO FKDQJHV DURXQG P
WRSLFV WKDW WKLV LQLWLDWLYH FRYHU LQFOXGH DW /(\$67 WKH IROORZLQJ
YLGHR JDPHV :DVWH HGXFDWLRQ RQ FDPSXV LQFOXGLQJ ZKD W WR UHF\\F
HOLPLQDWH FDPSXV ZDVWH UHXVDEOH EDJV ERWWOHV DQG HWF , QIRU
LQFOXGH WKH 3ODVWLWLF , QLWLDWLYH VHH EHORZ & DUSRROLQJ & RQW

352 - (& 7 83 '\$ 7(6

7KH IDOO VPHVWHU ZDV IRFXVHG RQ VSUHD GRUQSJO\Z\DU\HEQ\KNDM\QBL\O\H RX\W O H
UHXVDEOH VROXWLRQV 7KH VSULQJ VPHVWHU LV IRFXVHG RQ VXUYH\LQJ V
LPSURYH RXU HIRUWV DV ZH DWWHPSW WR UHDFK WKH UHVW RI WKH VWXG

352 - (& 7 287 & 20 (6

‡ 'HYHORS D EHKDYLRLU FKDQJH SURJUDP IRU VWXGHQWV IDFXOW\ DQG VWI
PLOHVWRQHV FDPSXV ZLGH FRPPXQLFDWLRQ DQG UHZDUG V\VWHPV

\$))(& 7 (' 0 (75 , & 6



0HWULF 0HWULF 'HVFULSWLRQ

.H\ 5HVXOWV

3HUFHQWDJH RI IRRG GLVSRVHG' IRYH\QWD QRQI SUH FRQVXPHU IRRG
FLUFXODU PDQQHU RU LQFLQHUDWLRQ

7RWDO SRWDEOH ZDWHU XVHG SHUE\RH\WHU WKH SRWDEOH ZDWHU
KLJKHVW FRQVXPSSLRQ EXLOGLQJ

0DVV RI SODVWLWGXH WR ZDWHU\H\Q\G\HE\MM\K\H\U\O\A\H DQG DYDLODEL
FRQVXPSSLRQ VROG RQ 9LOODQRYD V FDPSXV VRGD
ZDWHU FRIIHH HWF

& DPSXV V HQHUIJ\ LQWHQVLW\ V\H\W\H\Q\SH\DJ\\$ODQ WR UHGXFH HQHU

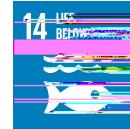
1HW FDUERQ HPLVVLRQV HPLW\H\Q\HE\Q\RS\W\K\Q\W\K\H\Q\VL\Y\H SODQ WR
IDFXOW\ DQG VWDII FRPPXWHU\WHODWHG FDUERQ HPLVVLRQV

6FRSH DQG QHW JUHHQKRXVH JDV HPLVVLRQV

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%(+\$9,25 &+\$1*(6

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0HWULF 0HWULF 'HVFULSWLRQ

.H\ 5HVXOWV

3URSRUWLRQ RI FRPPXWHU PL'@MM@RUSD@HSOHDQ WR UHGXFH FRPPXWL
XVLQJ ORZ FDUERQ WUDQVSRUWDWLRQ SXEOLF WUDQVLW
FDUSRRROLQJ ZDONLQJ ELNLQJ DQG HOHFWULF
YHKLFOHV

3HUFHQWDJH RI IRRG GLVSRVHGIRUWQ D QRQ@UH FRQVXPHU IRRG ZD
FLUFXODU PDQQHU LQFLQHUDWLRQ

6FRSH DQG QHW JUHHQKRXW@H@RSBLSQDQWR UHGXFH VFRSH