2EMHFWLYHV DQG EHQHILWV

'HVFULSWLRQ RI WKH SURMHFWV REMHFWLYHV IRU H[DPSOH
VFLHQWLILF QHHGV LW V DGGUHVVLQJ

:KDW V WKH DLP RI WKLV SURMHFW"

7KH DLP LV WR DVVHVV WKH VDIHW\ DQG IHDVLELOLW\ RI D Q
6 HePð PHHEQWUD(FLOLL€GLLOFLWLOOF VFJ
6 HePð P@pOD pFP GU(F LR•pLU RV LDD pFWP †TWLL€   P0

GHYHORS VHSVLV 6HSVLV LV FDXVHG E\ SDWKRJHQV IURP DO

EORRGVWUHDP &29,' DQG VHSVLV FDQ ERWK HOLFLW D DEQR

PXOWLSOH RUJDQ IDLOXUH DQG GHDWK 7KH FKDOOHQJH LQ

UHVSRQVH FRQWULEXWH WR WKH GLVHDVH 7KH DELOLW\ WR

LQIODPPDWRU\ UHVSRQVH FRXOG VLJQLILFDQWO\ LPSURYH P

,Q SDUWLFXODU WKHUH LV DQ XUJHQW QHHG IRU QHZ WKHUD

PRUWDOLW\ RI &29,'   DQG WKH QXPEHU RI SDWLHQWV WKDW

VKRZQ WKDW PXFK RI WKH KDUP GRQH LQ VHYHUH FDVHV RI &

K\SHU LPPXQH UHVSRQVH 8VLQJ WKH PDJQHWLF EORRG ILOW

LQIODPPDWRU\ VWDWH ZLWKRXW V\VWHPLF GHOLYHU\ RI ELR

LPPXQH UHVSRQVH ZLWKRXW FDXVLQJ ORQJ WHUP LPPXQRVX

K\SHULQIODPPDWLRQ VHHQ LQ WKH OXQJV WKDW GULYHV KRV

SDWLHQWV WKDW UHVXOWV LQ VLJQLILFDQW PRUWDOLW\

+RZ ZLOO \RX ORRN WR PD[LPLVH WKH RXWSXWV RI WKLV ZRU

7KH RXWSXWV IURP WKLV ZRUN ZLOO EH GLVVHPLQDWHG WR

SHHU UHYLHZHG MRXUQDOV DQG E\ SUHVHQWDWLRQ DW LQW

SXEOLVKHG DQG VKDUHG ZLWKLQ WKH VFLHQWLILF FRPPXQL

SDW
 X

$QLPDOV ZLOO EH DFFOLPDWLVHG DQG WUDLQHG IRU KDQGO

,Q WKH ILUVW VWXG\ DQLPDOV ZLOO EH DQDHVWKHWLVHG D

$QLPDOV ZLOO EH DFFOLPDWLVHG DQG WUDLQHG IRU KDQGO

6WDWH ZKDW QRQ DQLPDO DOWHUQDWLYHV DUH DYDLODEOH
FRQVLGHUHG DQG ZK\ WKH\ FDQQRW EH XVHG IRU WKLV SXUS

:K\ GR \RX QHHG WR XVH DQLPDOV WR DFKLHYH WKH DLP RI \

3UH FOLQLFDO VDIHW\ VWXGLHV FRQGXFWHG LQ DQLPDOV DU
PHGLFDO GHYLFH ,QWHUQDWLRQDO VWDQGDUGV ,62   SD
HYDOXDWLRQ RI PHGLFDO GHYLFHV DQG OLVW WKH VHOHFWL
GHYLFHV LQWHUDFWLQJ ZLWK EORRG 7KHVH WHVWV UHTXLU

)RU HIILFDF\ VWXGLHV RQO\ D ZKROH ELRORJ\ V\VWHP DSSU
RI WKH K\SHU LQIODPPDWRU\ FRQGLWLRQV WKH GHYLFH LV G

:KLFK QRQ DQLPDO DOWHUQDWLYHV GLG \RX FRQVLGHU IRU X

7KHUH DUH QR QRQ DQLPDO DOWHUQDWLYHV WR DFKLHYH WK

:K\ ZHUH WKH\ QRW VXLWDEOH"

1 $

5HGXFWLRQ

([SODLQ KRZ WKH QXPEHUV RI DQLPDOV IRU WKLV SURMHFW Z
EHHQ WDNHQ WR UHGXFH DQLPDO QXPEHUV DQG SULQFLSOH
WKDW DUH XVHG WKURXJKRXW WKH SURMHFW WR PLQLPLVH
DQ\ 7KHVH PD\ LQFOXGH H J SLORW VWXGLHV FRPSXWHU P

+RZ KDYH \RX HVWLPDWHG WKH QXPEHUV RI DQLPDOV \RX ZL

)LQDOO\ WHUPLQDO VWXGLHV GHVLJQHG WR WHVW HIILFDF\
WKH LQIODPPDWRU\ FRPSRXQGV LQ ODUJH DQLPDO PRGHOV L
DW WKH WHVW IDFLOLW\ DV ZHOO DV EHQFK WRS WHVWLQJ
EORRG WKHVH WRJHWKHULJQHG H HOO PHDOHKHVHO
EORRGIOR•JHH e LHH TRRLVRDE I

$QLPDOV ZLOO FRQWLQXDOO\ EH PRQLWRUHG IRU VLJQV RI S
H[SHULHQFHG YHWHULQDULDQV DQG DQLPDO FDUH WHFKQLF

$QDHVWKHWLVWV ZRUN WR EHVW SUDFWLFH JXLGHOLQHV IRU
XS WR GDWH ZLWK QHZ SUDFWLFHV

6WDQGDUG 2SHUDWLQJ 3URFHGXUHV DUH HPSOR\HG IRU DQL

+RZ ZLOO \RX VWD\ LQIRUPHG DERXW DGYDQFHV LQ WKH 5V
HIIHFWLYHO\ GXULQJ WKH SURMHFW"

:H ZLOO FRQWLQXRXVO\ PRQLWRU SXEOLFDWLRQV DQG WKH
FRXOG EH LPSOHPHQWHG DV SDUW RI WKLV SURMHFW ,Q DG
SXEOLVKHG RQ LQWHUQDO 1HZV)RUXP DQG RWKHU UHOHYDG
SRVVLEOH ZH ZLOO LPSOHPHQW WKHVH UHILQHPHQWV LQWR